

# AIRBAG SYSTEM

## PRECAUTION

### CAUTION:

- The vehicle is equipped with a Supplemental Restraint System (SRS), which consists of a steering pad, front passenger airbag, curtain shield airbag, front seat side airbag, seat belt pretensioner, center airbag sensor, front airbag sensor, side airbag sensor, rear airbag sensor, occupant classification ECU and seat position airbag sensor. Failure to carry out service procedures in the correct sequence could cause SRS parts to unexpectedly deploy and possibly lead to serious injuries. Furthermore, if a mistake is made when servicing SRS parts, they may fail to operate when required. Before performing servicing (including installation/removal, inspection and replacement of parts), be sure to read the following precautions.
- Before starting work, wait at least 90 seconds after the ignition switch is turned OFF and after the cable of the negative (-) battery terminal is disconnected. (SRS parts are equipped with a backup power source. If work is started within 90 seconds of turning the ignition switch OFF and disconnecting the cable from the negative (-) battery terminal, SRS parts may deploy.)  
(The SRS is equipped with a back-up power source, so if work is started within 90 seconds of disconnecting the negative (-) terminal cable of the battery, the SRS may be deployed).
- Do not expose SRS parts directly to hot air or flames.

### NOTICE:

- Malfunction symptoms of SRS parts are difficult to confirm. DTCs are the most important source of information when troubleshooting. During troubleshooting, always confirm DTCs before disconnecting the cable from the negative (-) battery terminal.
- For minor collisions where SRS parts do not deploy, always inspect the SRS parts.
- Before repair work, remove airbag sensors as necessary if any kind of impact is likely to occur to an airbag sensor during the operation.
- Never use SRS parts from another vehicle. When replacing SRS parts, replace them with new ones.
- Never disassemble or attempt to repair SRS parts.
- If an SRS part has been dropped, or if there are any cracks, dents or other defects in the case, bracket or connector, replace the SRS part with a new one.
- Use an ohmmeter/voltmeter with high impedance (10 k $\Omega$ /V minimum) for troubleshooting the electrical circuits.

- Information labels are attached to the periphery of SRS parts. Follow the cautions and instructions on the labels.
- After work on SRS parts is completed, perform the SRS warning light check (see page RS-37).
- When the cable is disconnected from the negative (-) battery terminal, the memory settings of each system will be cleared. Because of this, be sure to write down the settings of each system before starting work. When work is finished, reset the settings of each system as before. Never use a backup power supply from outside the vehicle to avoid erasing the memory in a system.
- If the vehicle is equipped with a mobile communication system, refer to the precautions in the INTRODUCTION section (see page IN-5).

**HINT:**

In the airbag system, the center airbag sensor, front airbag sensor LH and RH, side airbag sensor LH and RH, and rear airbag sensor LH and RH are collectively referred to as the airbag sensors.

**1. HANDLING PRECAUTIONS FOR AIRBAG SENSORS**

- (a) Before starting the following operations, wait for at least 90 seconds after disconnecting the negative (-) terminal cable from the battery:
  - (1) Replacement of the airbag sensors
  - (2) Adjustment of the front/rear doors of the vehicle equipped with the side airbags and curtain shield airbags (fitting adjustment)
- (b) When connecting or disconnecting the airbag sensor connectors, ensure that each sensor is installed in the vehicle.
- (c) Do not use airbag sensors which have been dropped during the operation or transportation.
- (d) Do not disassemble the airbag sensors.

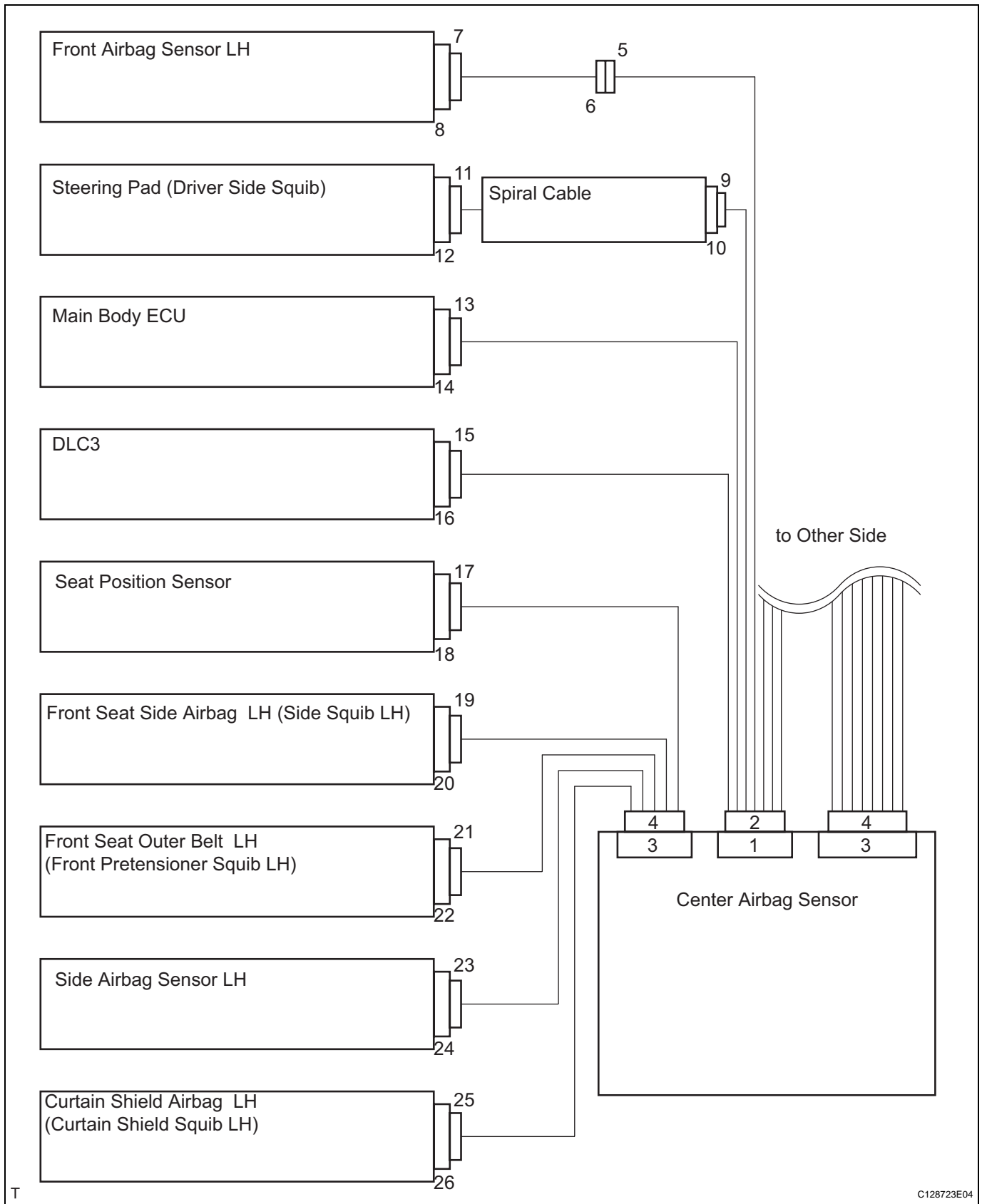
**2. INSPECTION PROCEDURE FOR VEHICLE INVOLVED IN ACCIDENT**

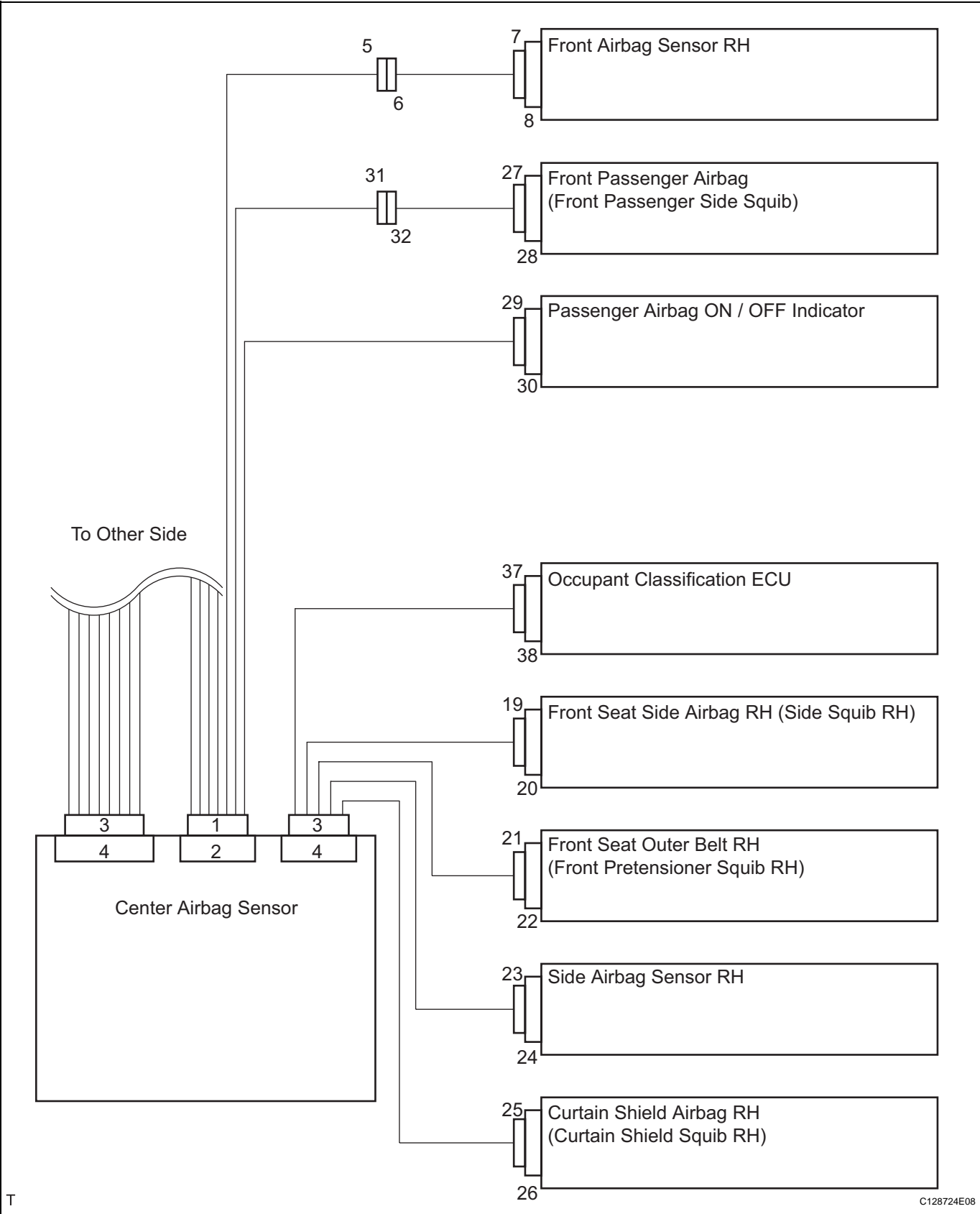
- (a) When the airbag has not deployed, confirm the DTCs by checking the SRS warning light. If there is any malfunction in the SRS airbag system, perform troubleshooting.
- (b) When any of the airbags have deployed, replace the airbag sensors and check the installation condition.

**3. SRS CONNECTOR**

(a) SRS connectors are located as shown in the following illustration.

(1) w/ Front seat side airbag and curtain shield airbag

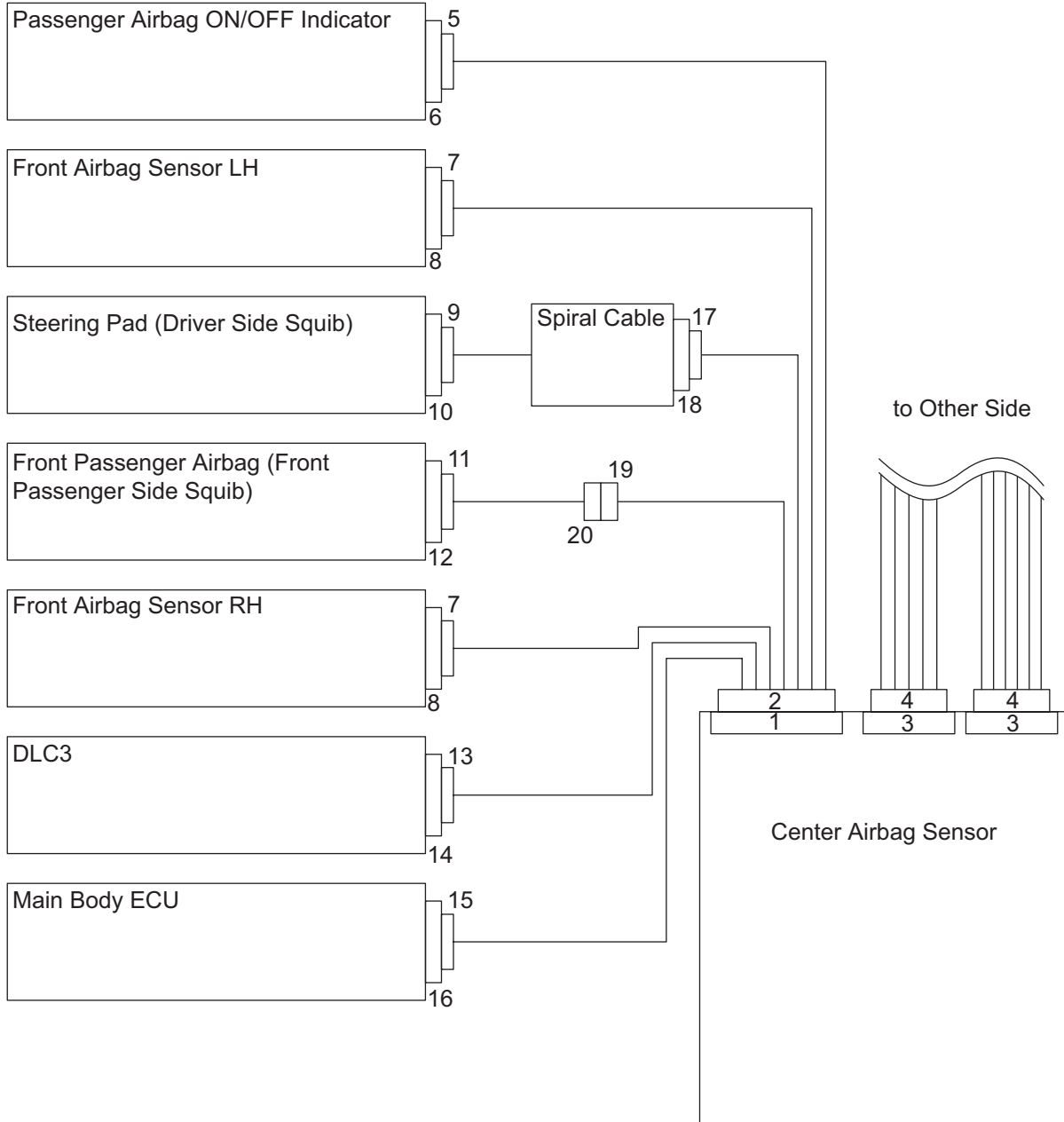




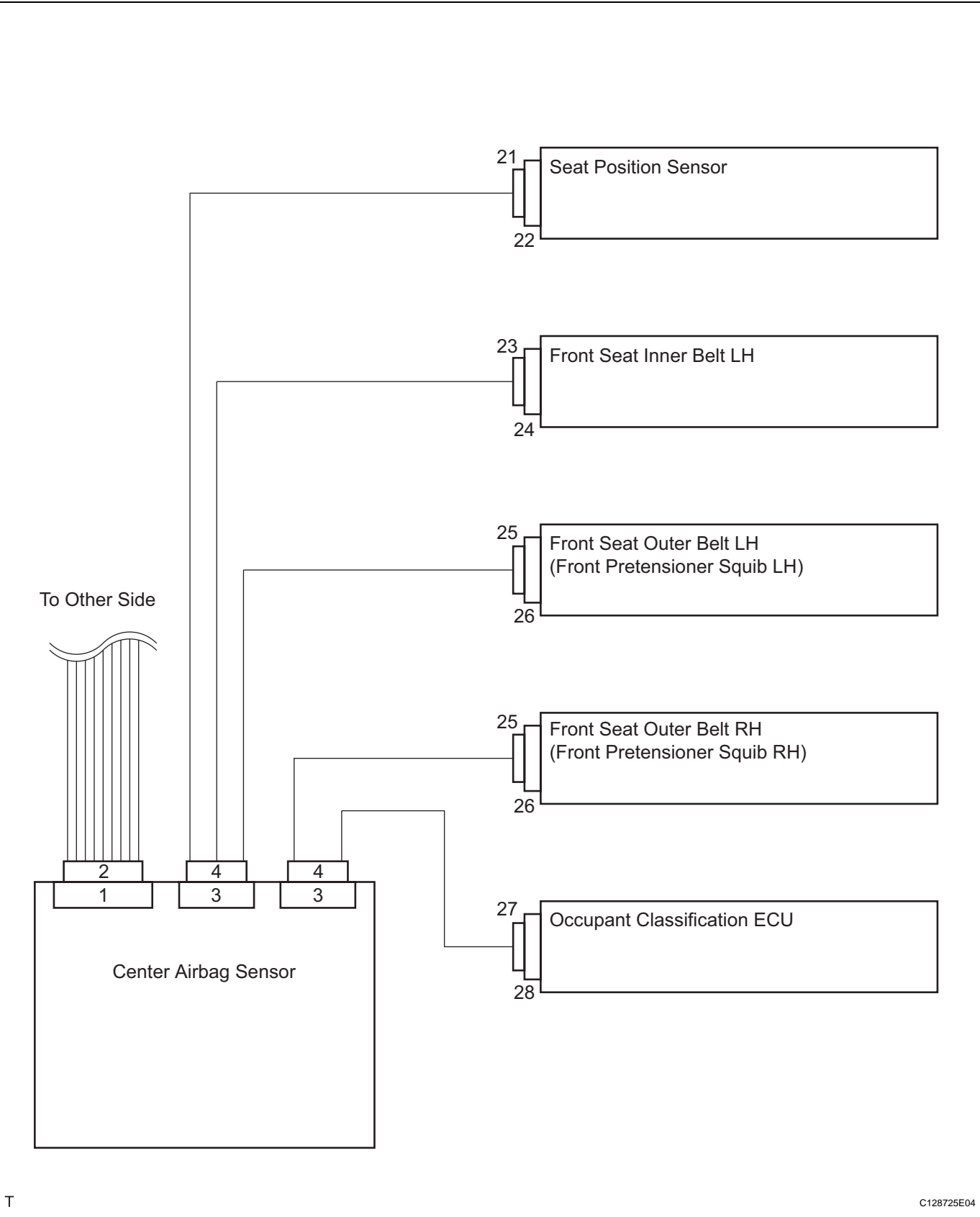
No.	Item	Application
(1)	Terminal Twin-Lock Mechanism	Connectors 1, 3, 5, 7, 9, 13, 23, 31, 37
(2)	Activation Prevention Mechanism	Connectors 1, 3, 8, 12, 22, 26, 28
(3)	Half Connection Prevention Mechanism	Connectors 6, 7, 9, 23, 32

No.	Item	Application
(4)	Connector Position Assurance Mechanism	Connector 6, 23
(5)	Connector Lock Mechanism (1)	Connectors 11, 21, 25, 27
(6)	Connector Lock Mechanism (2)	Connectors 1, 3
(7)	Improper Connection Prevention Lock Mechanism	Connectors 2, 4

(2) w/o Front seat side airbag and curtain shield airbag

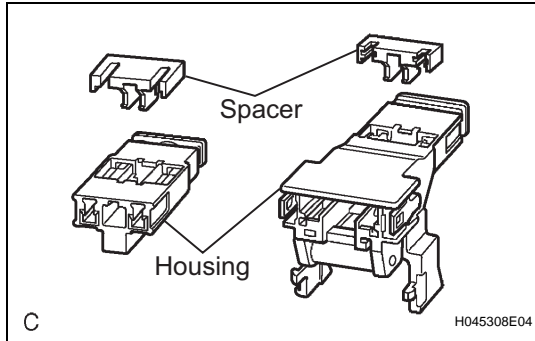


RS



No.	Item	Application
(1)	Terminal Twin-Lock Mechanism	Connectors 2, 4, 7, 15, 17, 19, 27
(2)	Activation Prevention Mechanism	Connectors 2, 4, 8, 10, 12, 26
(3)	Half Connection Prevention Mechanism	Connectors 7, 17

No.	Item	Application
(4)	Connector Position Assurance Mechanism	Connector 7
(5)	Connector Lock Mechanism (1)	Connectors 9, 11, 25
(6)	Connector Lock Mechanism (2)	Connectors 1, 3
(7)	Improper Connection Prevention Lock Mechanism	Connectors 2, 4

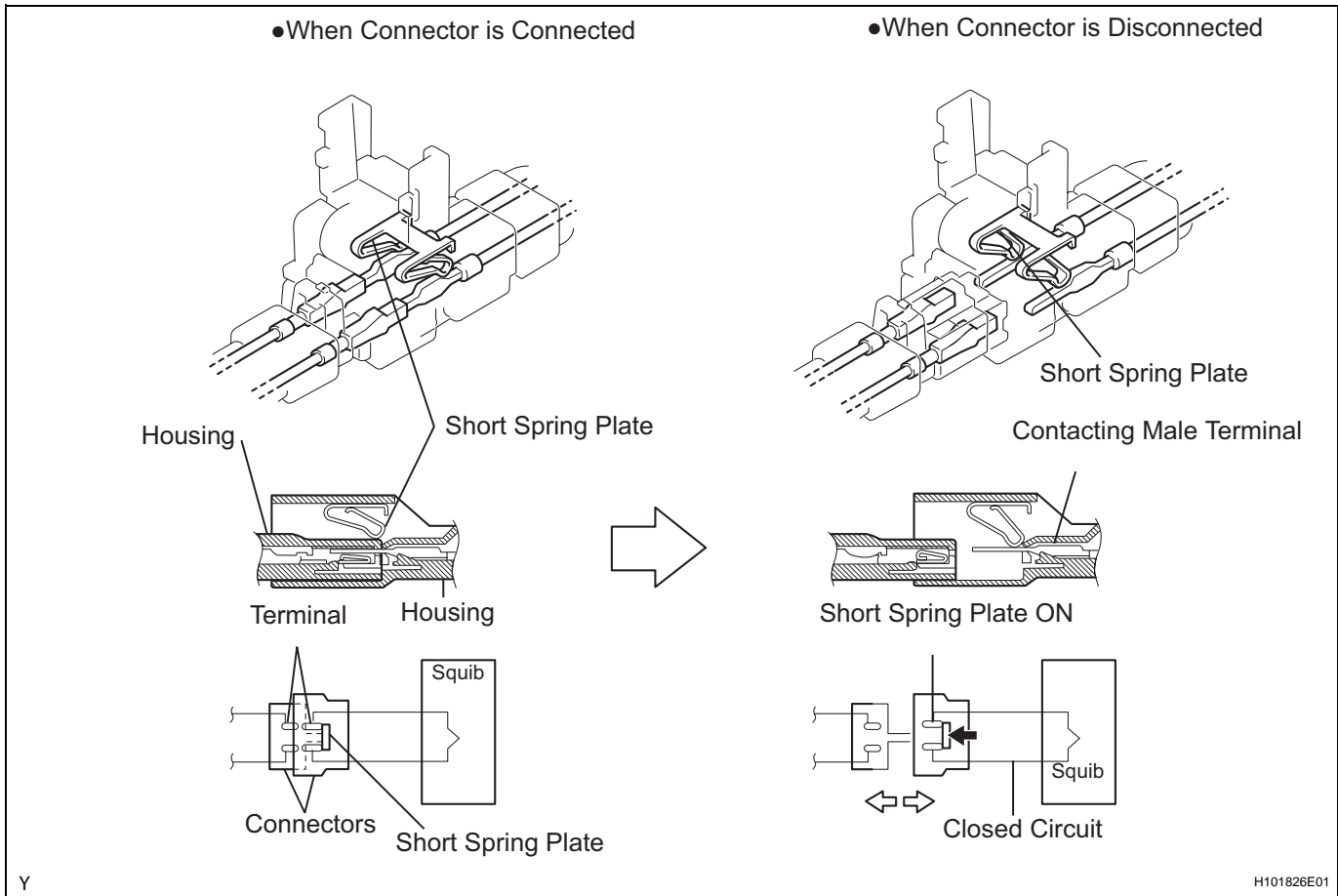


(b) All connectors in the SRS except the seat position sensor connector and the occupant classification ECU connector are colored yellow to distinguish them from other connectors. Some connectors have special functions, and are specially designed for the SRS. These connectors use durable gold-plated terminals, and are placed in the locations shown above to ensure high reliability.

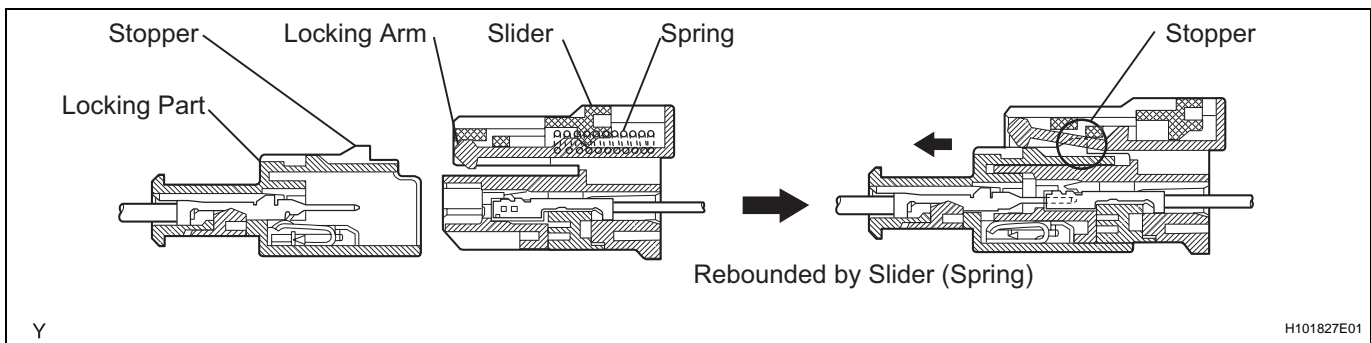
(1) Terminal twin-lock mechanism:

Each connector is a two-piece component consisting of a housing and a spacer. This design enables the terminal to be locked securely by two locking devices (the retainer and the lance) to prevent the terminals from becoming disconnected.

- (2) Activation prevention mechanism:  
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate creates a short circuit by automatically connecting the positive (+) and negative (-) terminals of the squib.

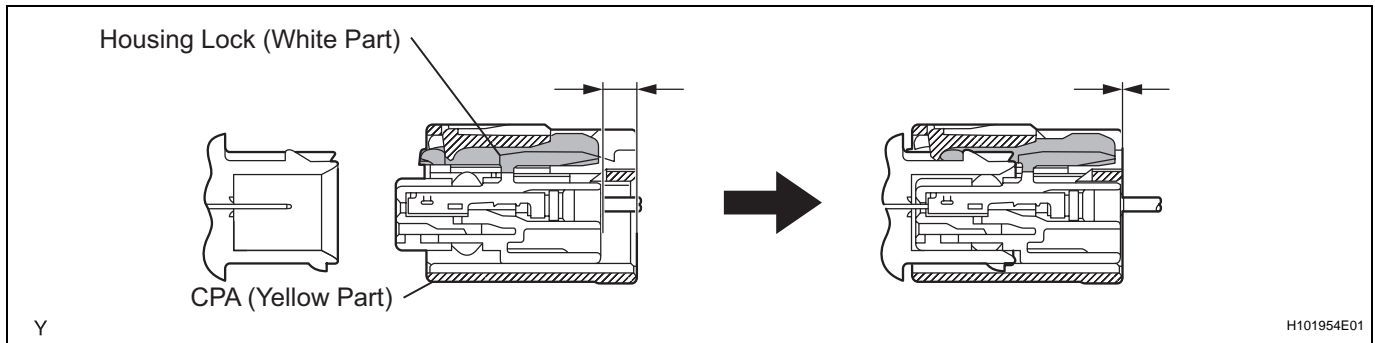


- (3) Half connection prevention mechanism:  
If the connector is not completely connected, the connector is disconnected by the spring operation so that no continuity exists.

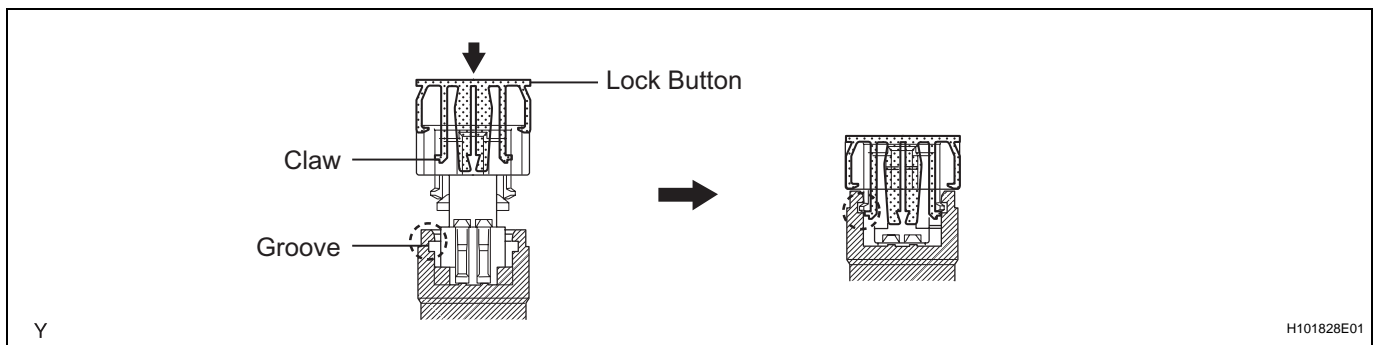




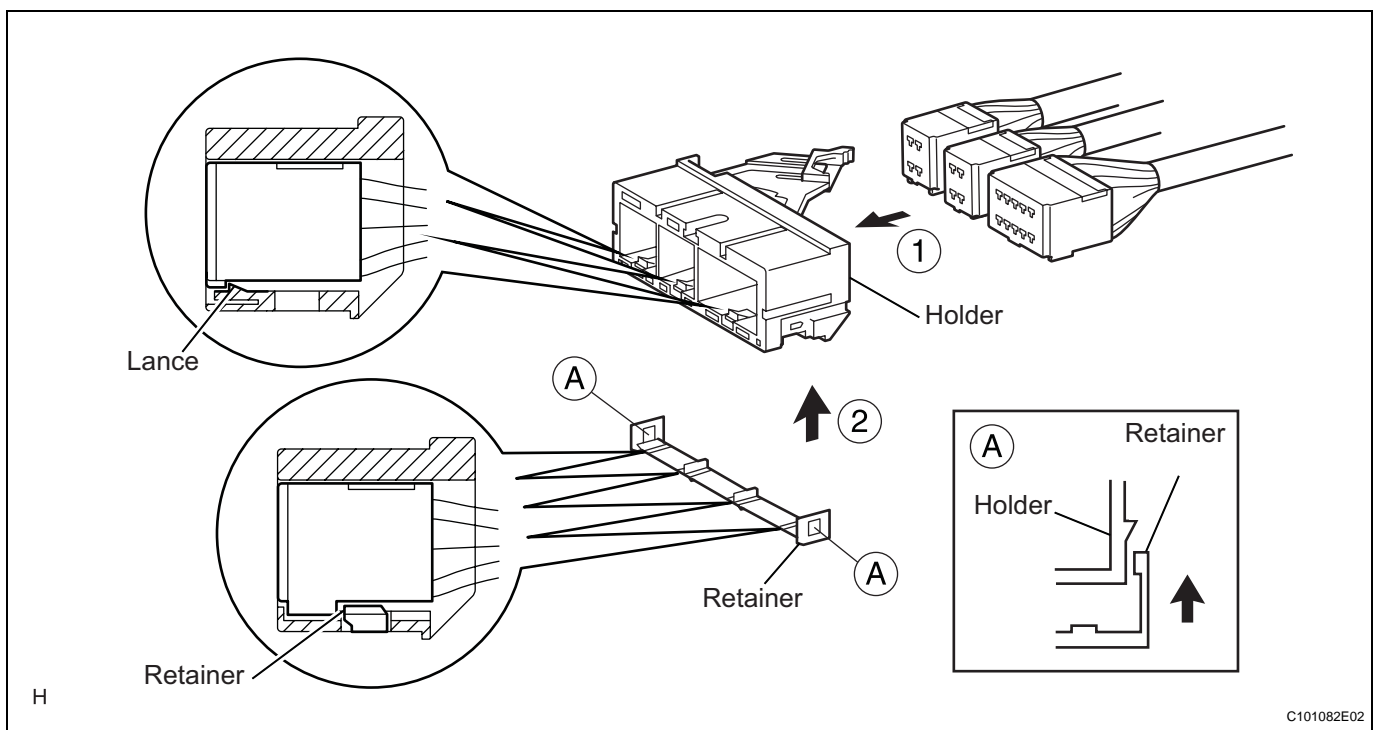
- (4) Connector position assurance mechanism:  
The CPA (yellow part) slides, which completes the connector engagement, only when the housing lock (white part) is completely engaged.



- (5) Connector lock mechanism (1):  
Locking the connector lock button connects the connector.

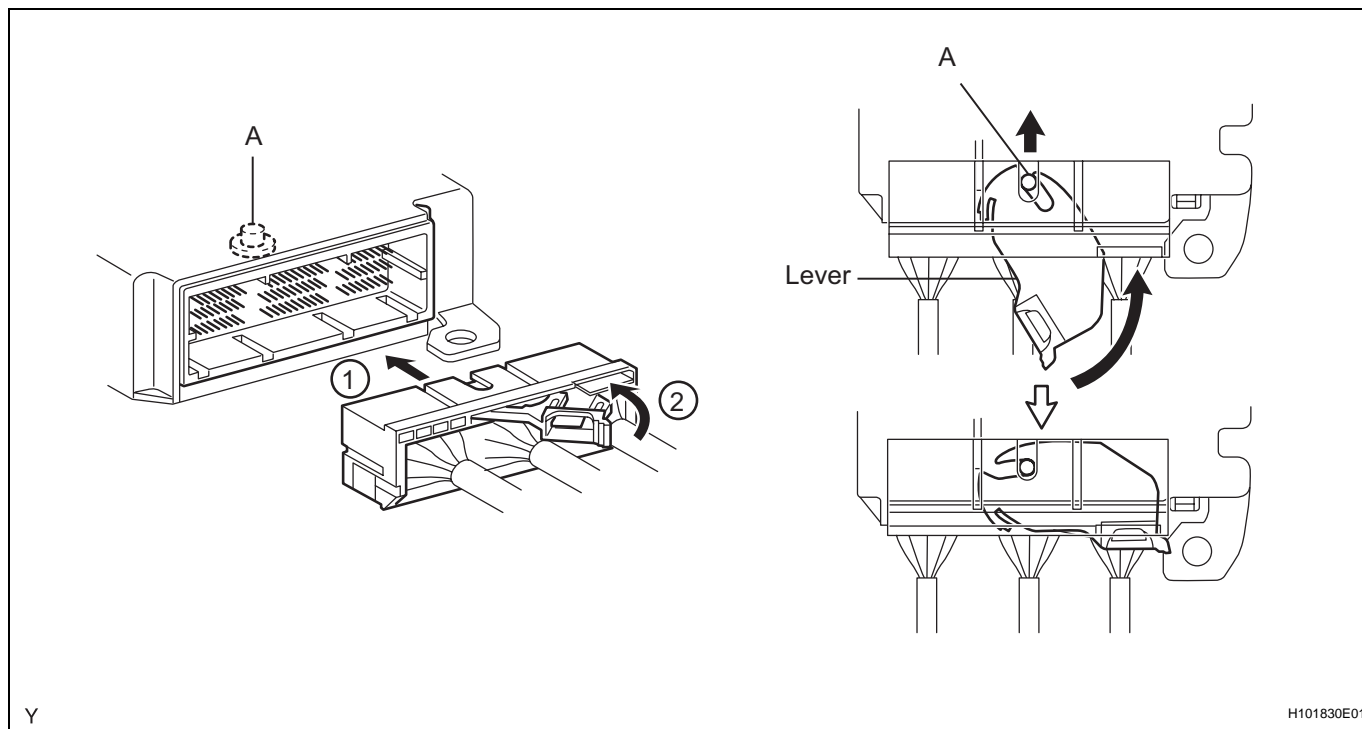


- (6) Connector lock mechanism (2):  
Both the primary lock with holder lances and the secondary lock with a retainer prevent the connectors from becoming disconnected.



(7) Improper connection prevention lock mechanism:

When connecting the holder, the lever is pushed into the end by rotating around the A axis to lock the holder securely.



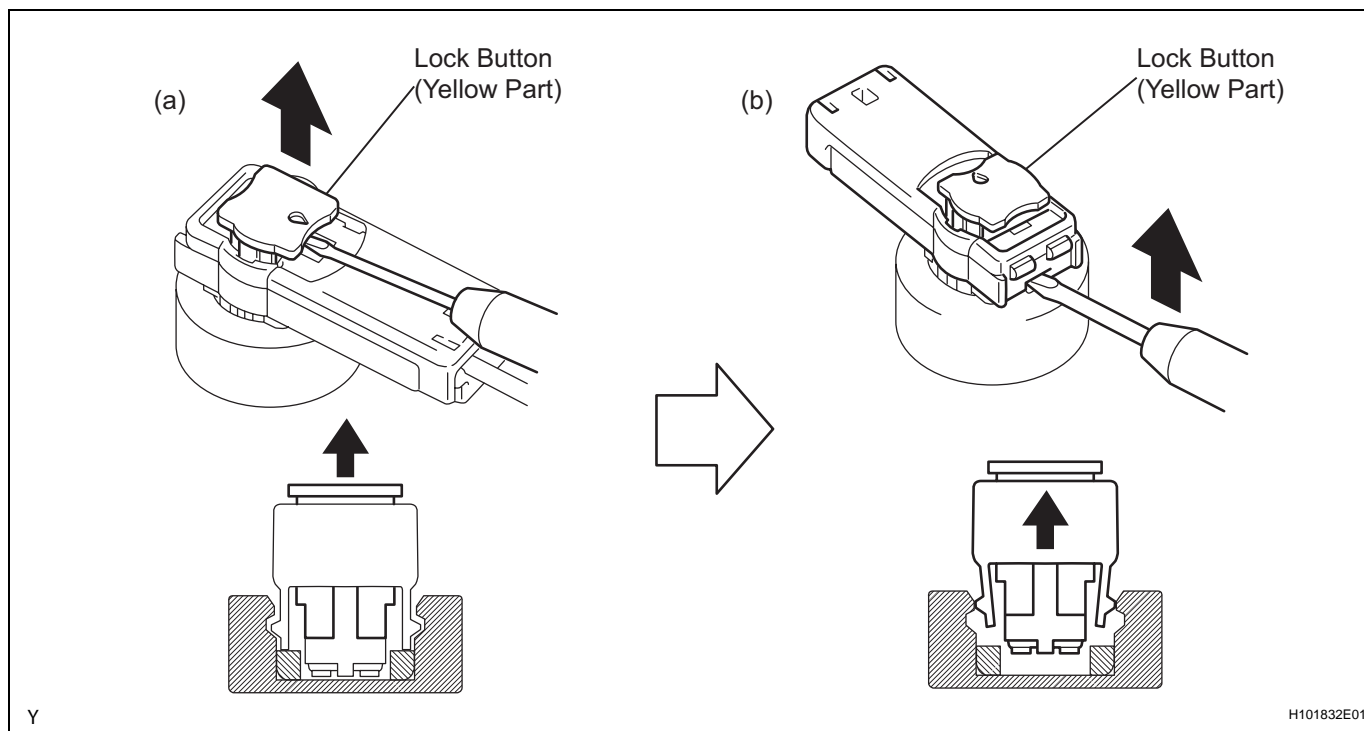
**4. DISCONNECTION OF CONNECTORS FOR STEERING PAD, FRONT PASSENGER AIRBAG ASSEMBLY (SQUIB SIDE), CURTAIN SHIELD AIRBAG ASSEMBLY AND FRONT SEAT OUTER BELT ASSEMBLY**

**HINT:**

Tape the screwdriver tip before use.

- (a) Release the lock button (yellow part) of the connector using a screwdriver.

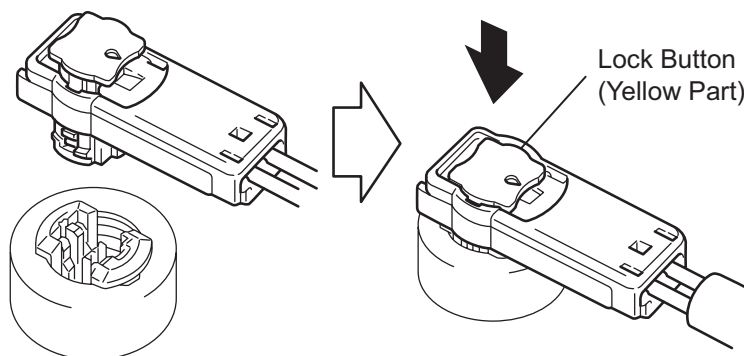
- (b) Insert the screwdriver tip between the connector and the base, and then raise the connector.



**5. CONNECTION OF CONNECTORS FOR STEERING PAD, FRONT PASSENGER AIRBAG ASSEMBLY (SQUIB SIDE), CURTAIN SHIELD AIRBAG ASSEMBLY AND FRONT SEAT OUTER BELT ASSEMBLY**

- (a) Connect the connector.

- (b) Push the lock button (yellow part) of the connector down securely. (When locking, a click sound can be heard.)

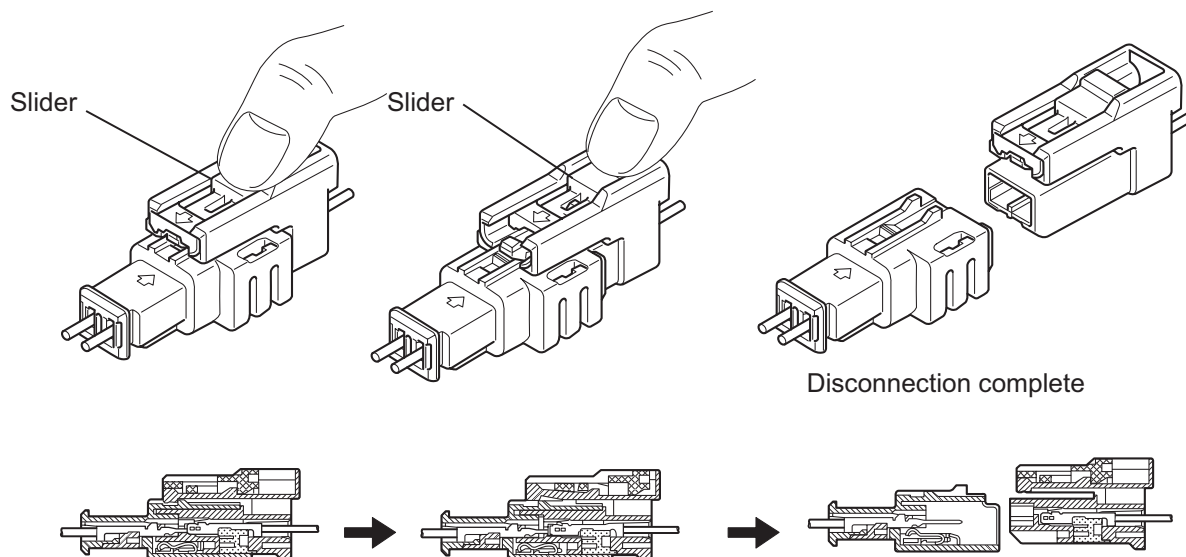


Y

H101833E01

#### 6. DISCONNECTION OF CONNECTORS FOR FRONT PASSENGER AIRBAG ASSEMBLY (INSTRUMENT PANEL WIRE SIDE)

- (a) Place a finger on the slider, slide the slider to release the lock, and then disconnect the connector.



Y

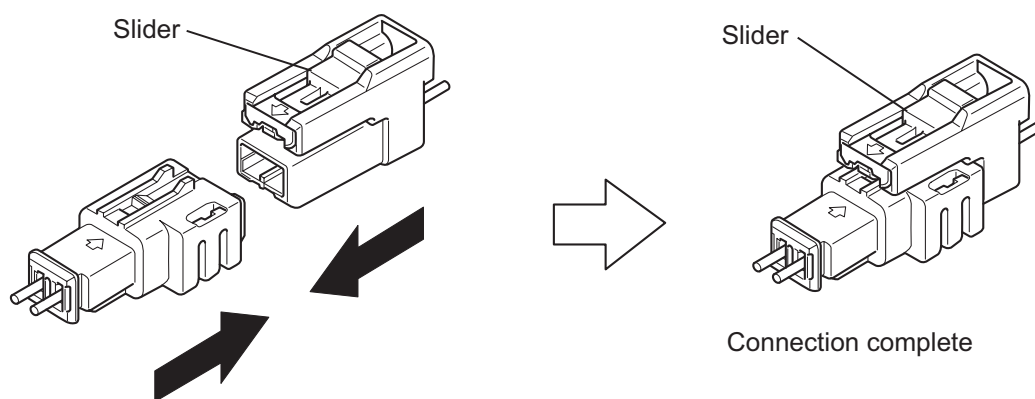
H101836E01

## 7. CONNECTION OF CONNECTORS FOR FRONT PASSENGER AIRBAG ASSEMBLY (INSTRUMENT PANEL WIRE SIDE)

- (a) Connect the connector as shown in the illustration.  
(When locking, make sure that the slider returns to its original position and a click sound can be heard.)

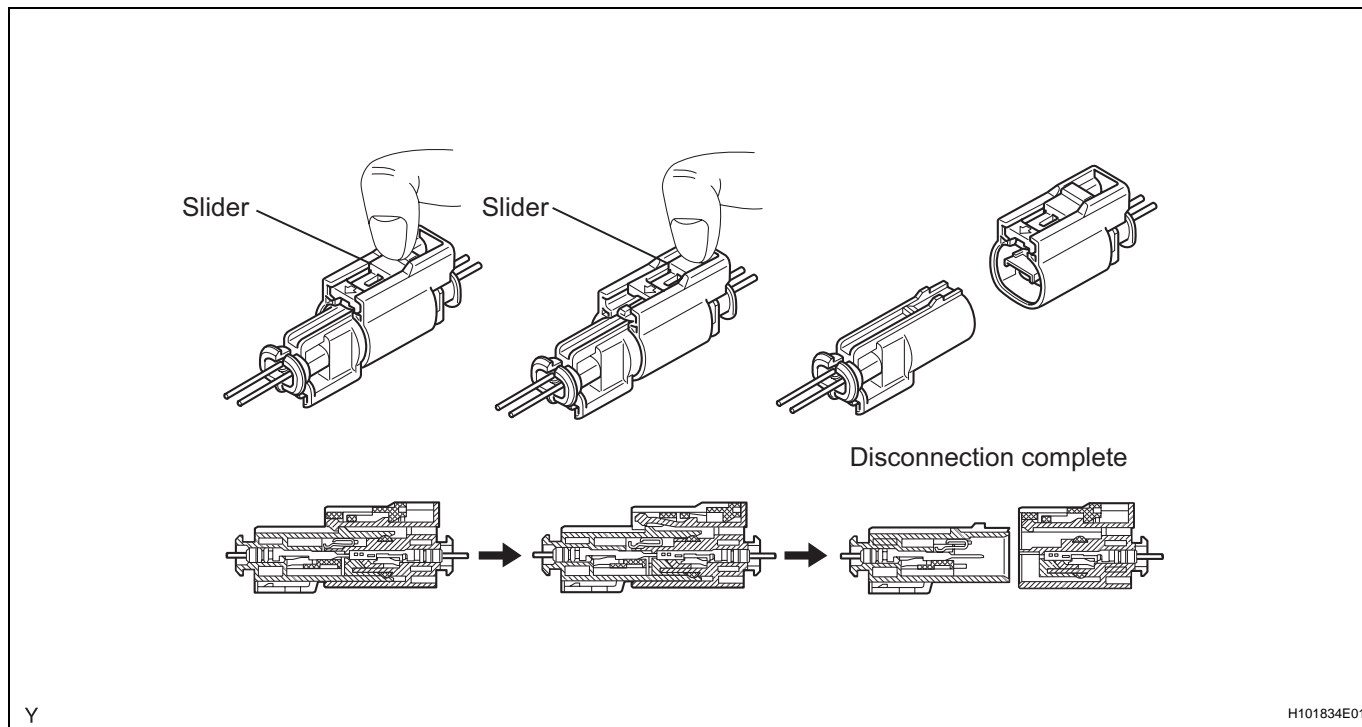
HINT:

When connecting, the slider slides. Do not touch the slider while connecting, as this may result in an insecure fit.



## 8. DISCONNECTION OF CONNECTORS FOR FRONT SEAT SIDE AIRBAG ASSEMBLY

- (a) Place a finger on the slider, slide the slider to release the lock, and then disconnect the connector.

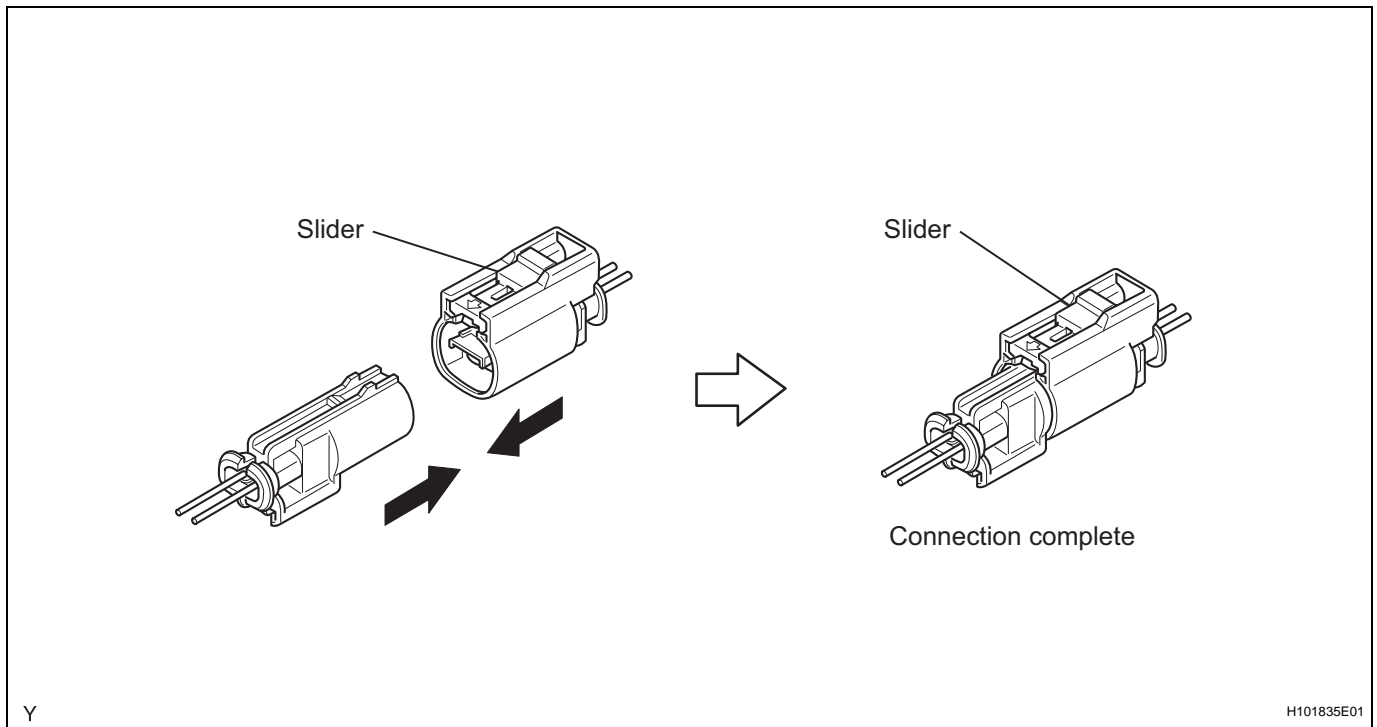


## 9. CONNECTION OF CONNECTORS FOR FRONT SEAT SIDE AIRBAG ASSEMBLY

- (a) Connect the connector as shown in the illustration. (When locking, make sure that the slider returns to its original position and a click sound can be heard.)

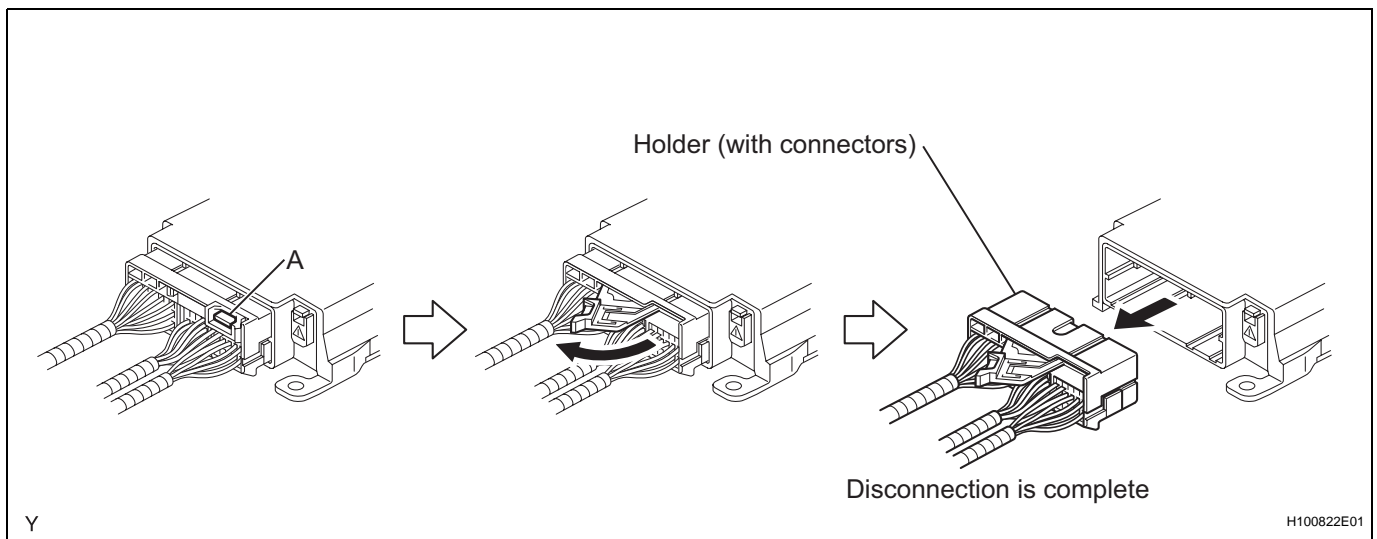
HINT:

When connecting, the slider slides. Do not touch the slider while connecting, as this may result in an insecure fit.



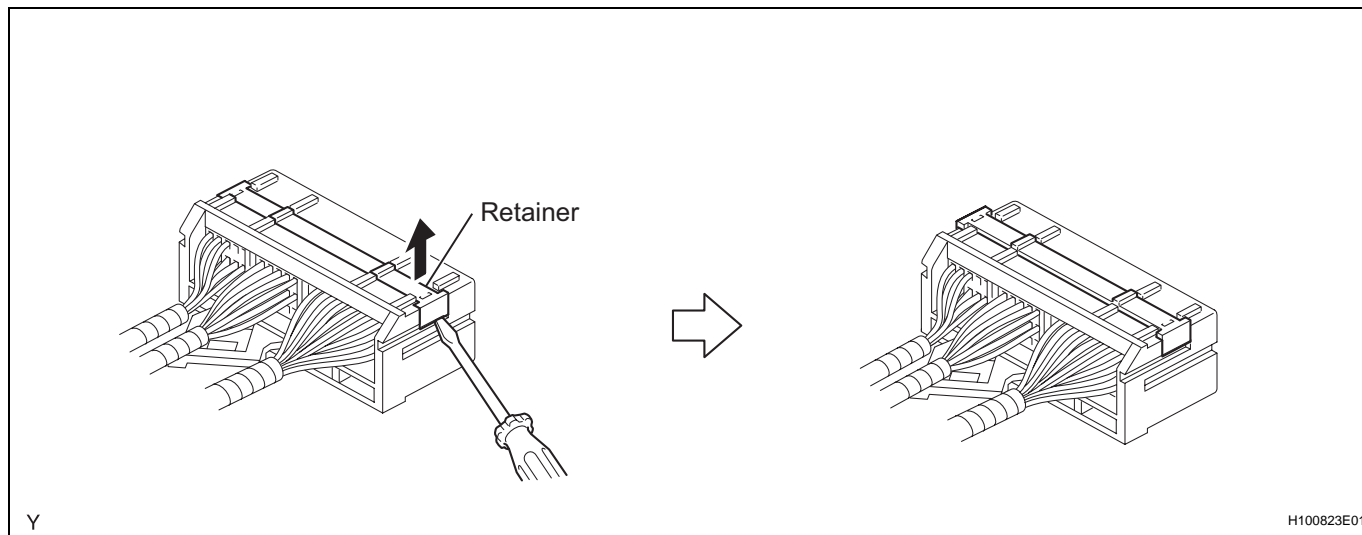
#### 10. DISCONNECTION OF CONNECTORS FOR CENTER AIRBAG SENSOR ASSEMBLY

- (a) Pull the lever by pushing part A as shown in the illustration and disconnect the holder (with connectors).

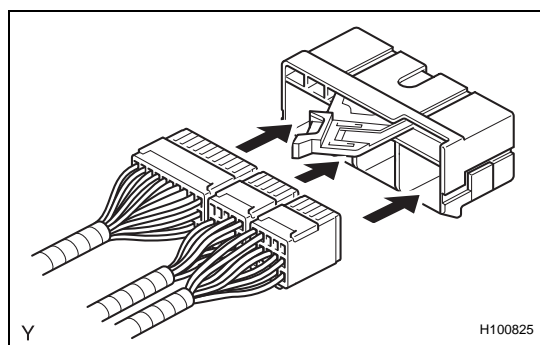
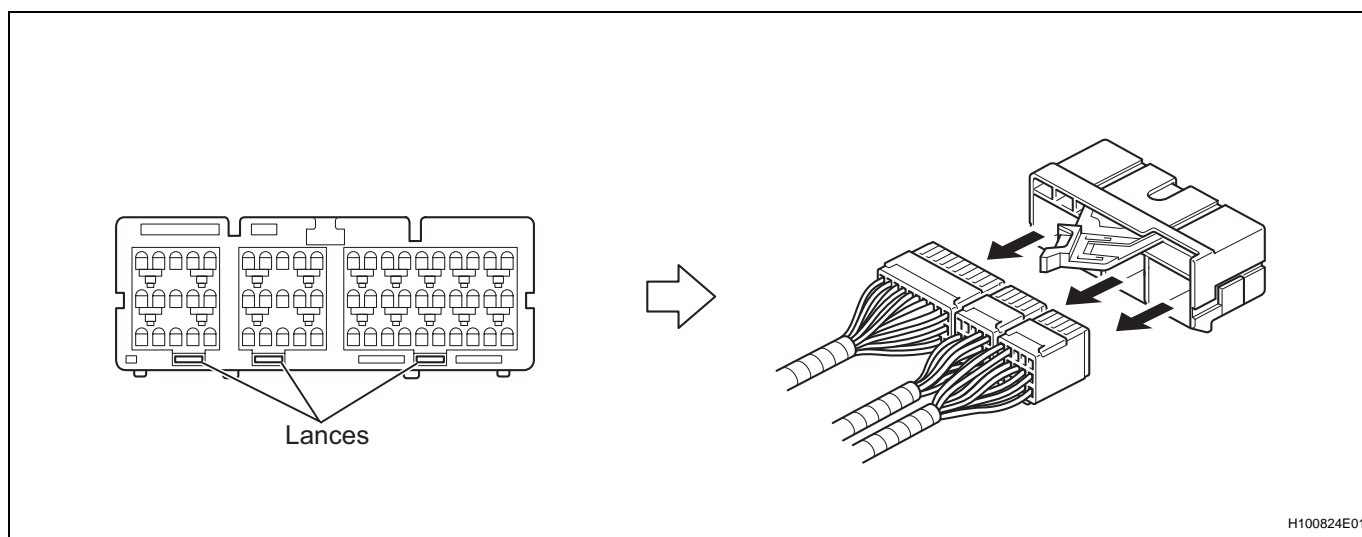


**HINT:**  
Perform the following procedures when replacing the holder.

- (b) Remove the holder.  
 (1) Using a screwdriver, unlock the retainer.



- (2) Release the fitting lances and remove the holder.



- (c) Install the holder.  
 (1) Install the connectors into the holder. (When locking, a click sound can be heard.)  
 HINT:  
 The retainer is locked when the holder is connected.

## 11. CONNECTION OF CONNECTORS FOR CENTER AIRBAG SENSOR ASSEMBLY

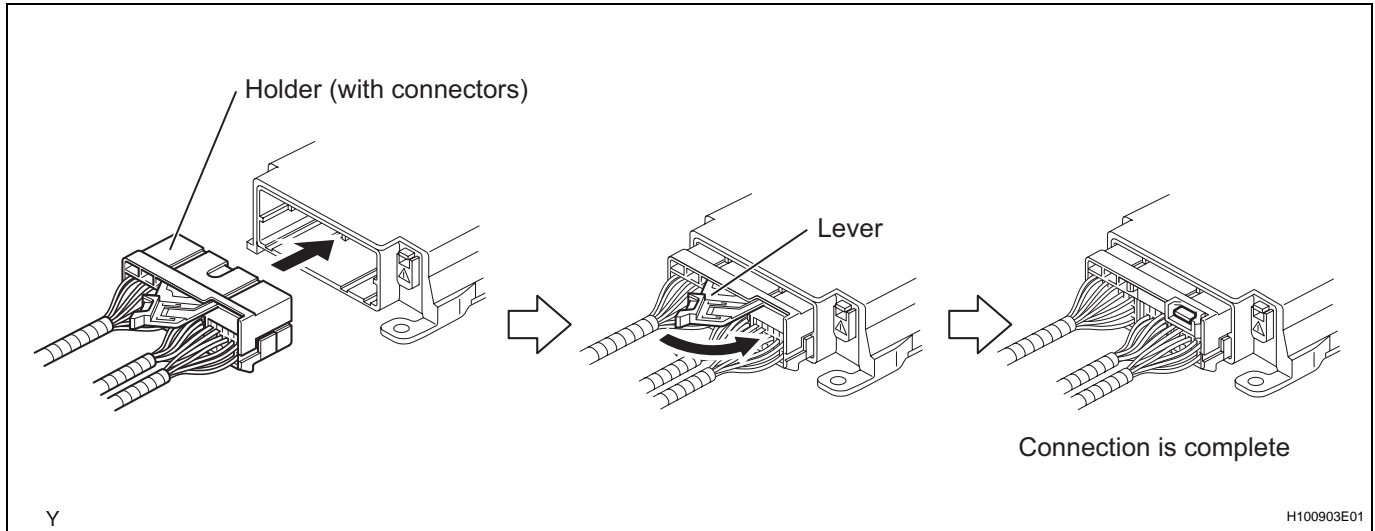
- (a) Firmly insert the holder (with connectors) into the center airbag sensor until it cannot be pushed any further.



- (b) Push the lever to connect the holder (with connectors). (When locking, a click sound can be heard.)

HINT:

The holder slides into the center airbag sensor when it is being connected. Do not hold the holder while connecting, as it may result in an insecure fit.

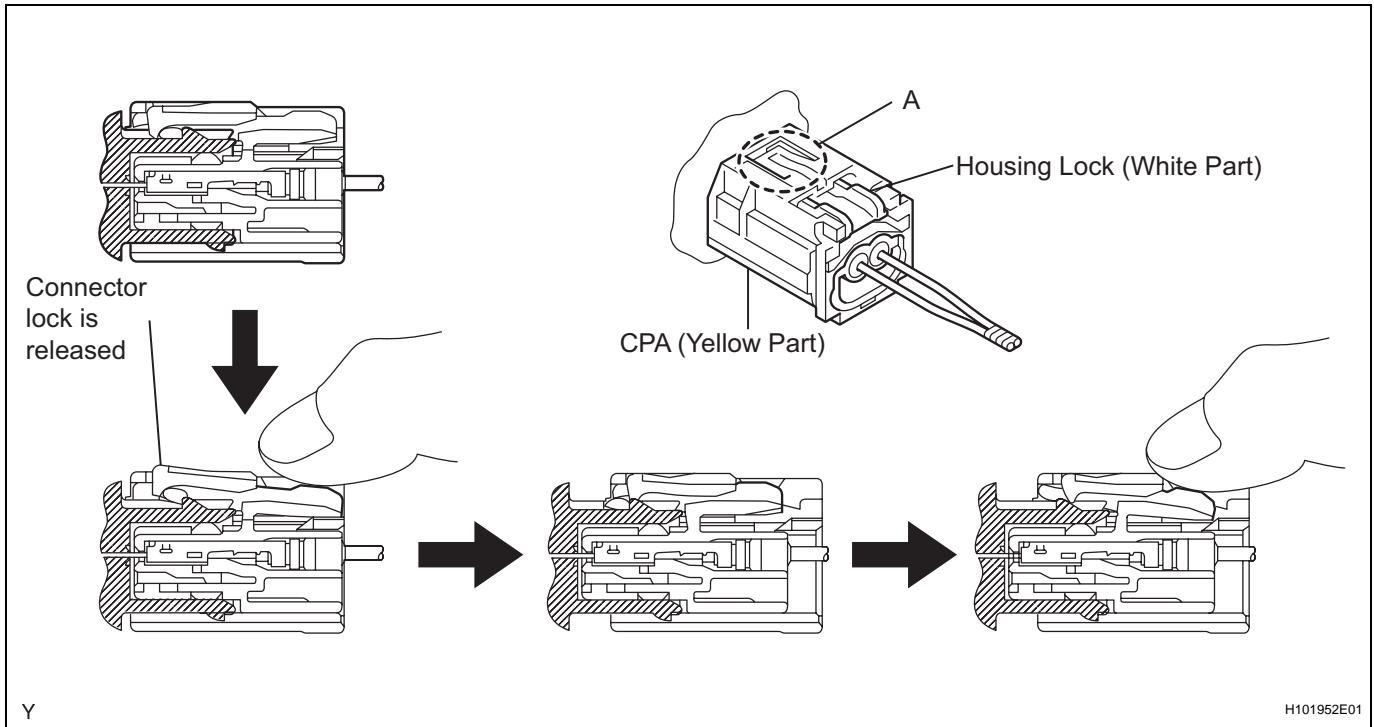


## 12. DISCONNECTION OF CONNECTORS FOR FRONT AIRBAG SENSOR

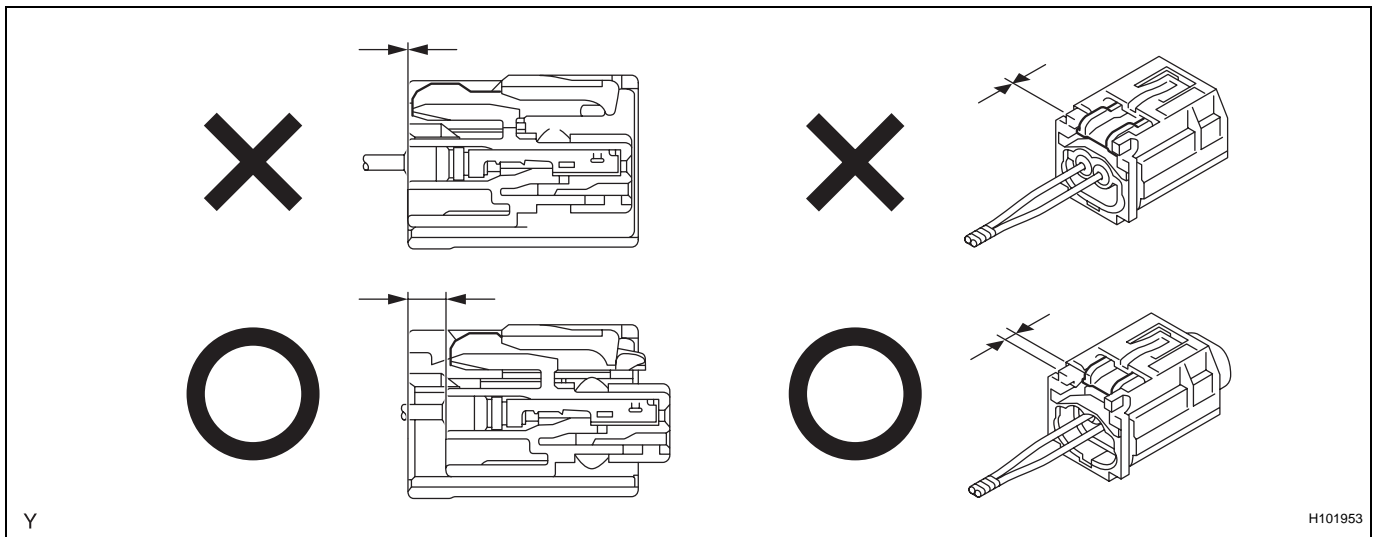
- (a) Push down the housing lock (white part) and slide the CPA (yellow part). (At this time, the connector cannot be disconnected.)
- (b) Push down the housing lock (white part) again and disconnect the connector.

HINT:

Do not push down part A shown in the illustration when disconnecting.

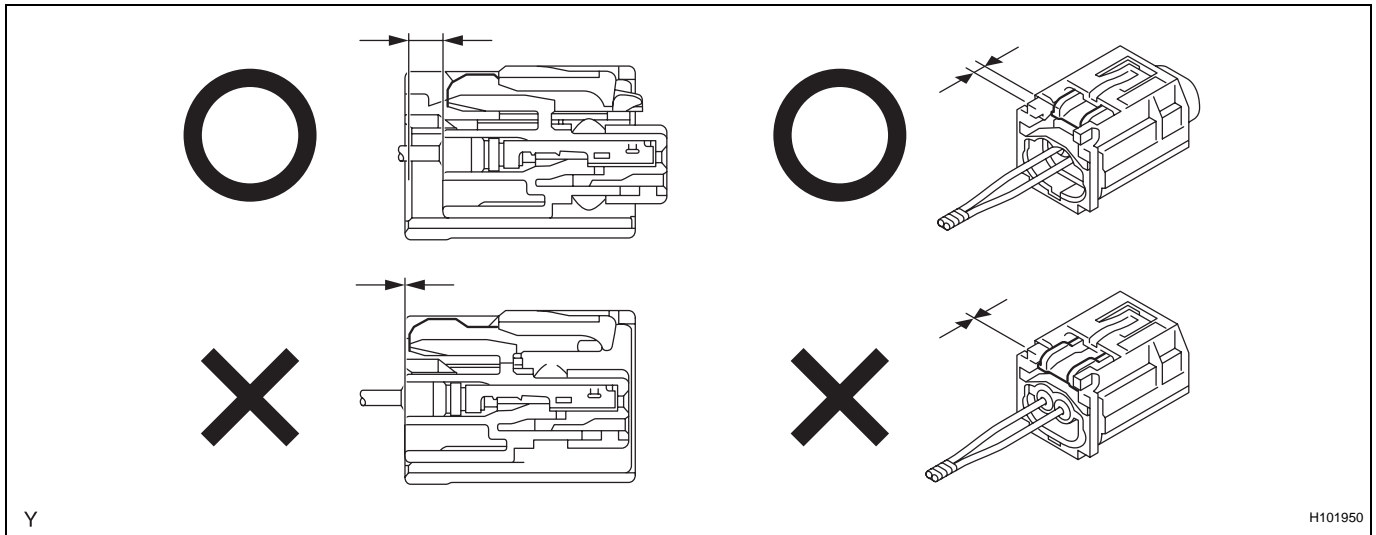


- (c) After disconnecting the connector, check that the position of the housing lock (white part) is as shown in the illustration.



### 13. CONNECTION OF CONNECTORS FOR FRONT AIRBAG SENSOR

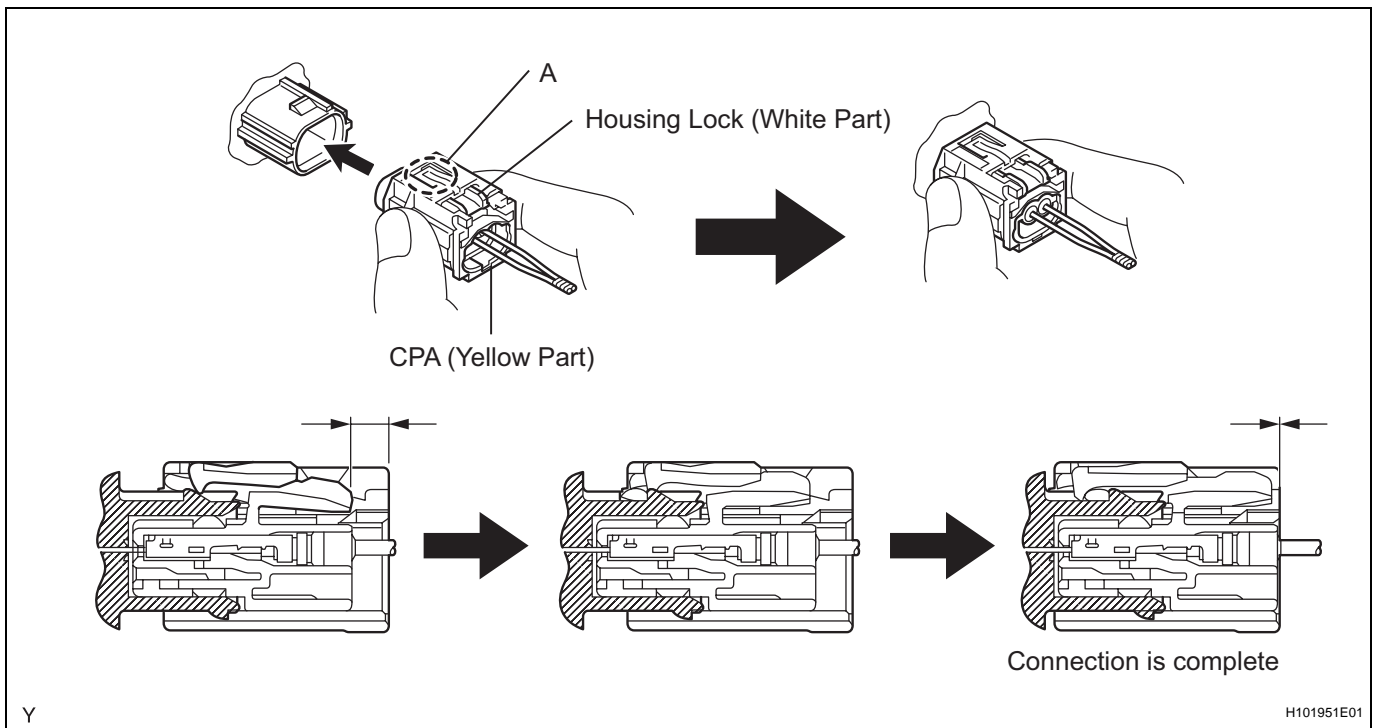
- (a) Before connecting the connectors, check that the position of the housing lock (white part) is as shown in the illustration.

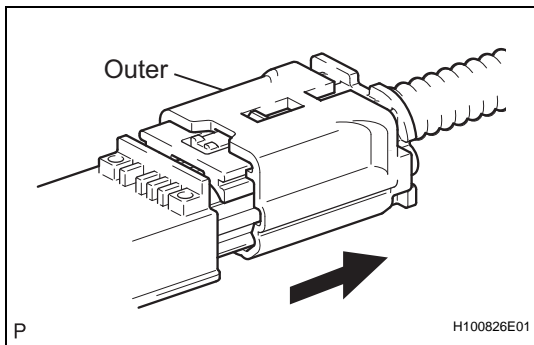


- (b) Be sure to engage the connectors until they are locked. (When locking, make sure that a click sound can be heard.)

HINT:

When connecting them, the housing lock (white part) slides. Do not hold the housing lock (white part) and part A, as it may result in an insecure fit.



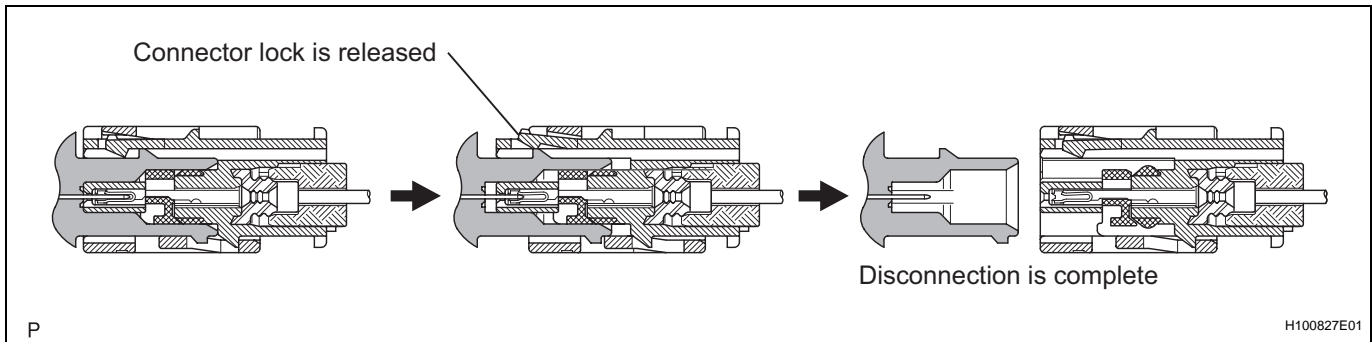


#### 14. DISCONNECTION OF CONNECTORS FOR SIDE AIRBAG SENSOR AND REAR AIRBAG SENSOR

- While holding both sides of the outer connector locking sleeve, slide the outer in the direction shown by the arrow.
- When the connector lock is released, the connectors are disconnected.

HINT:

Be sure to hold both outer flanks. Holding the top and bottom sides will make disconnection difficult.

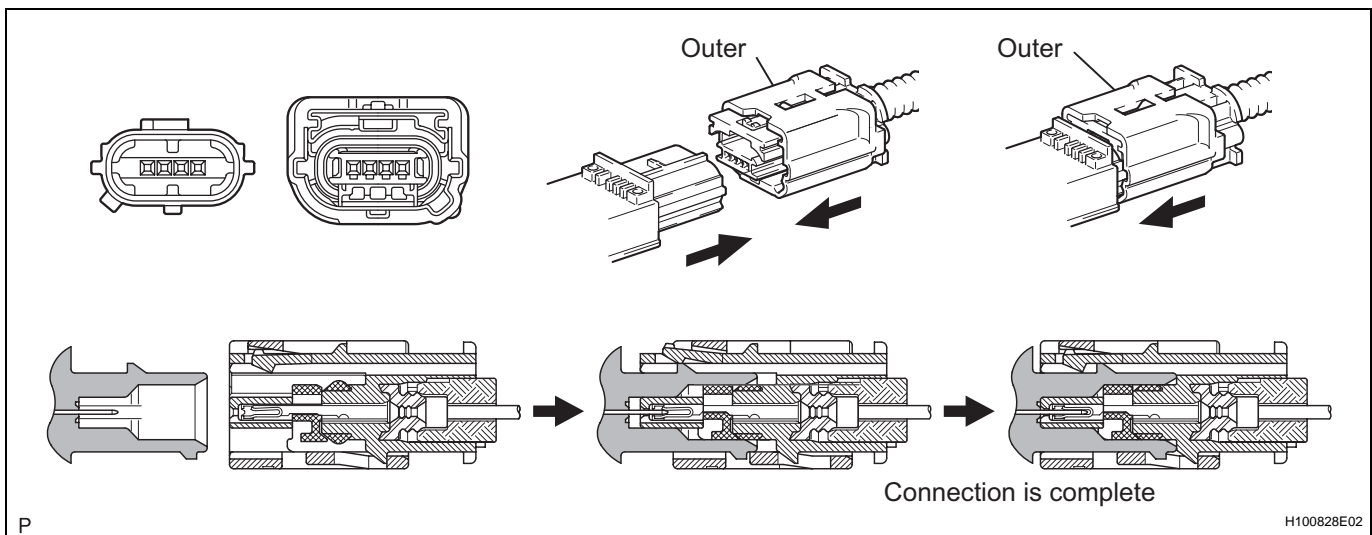


#### 15. CONNECTION OF CONNECTORS FOR SIDE AIRBAG SENSOR AND REAR AIRBAG SENSOR

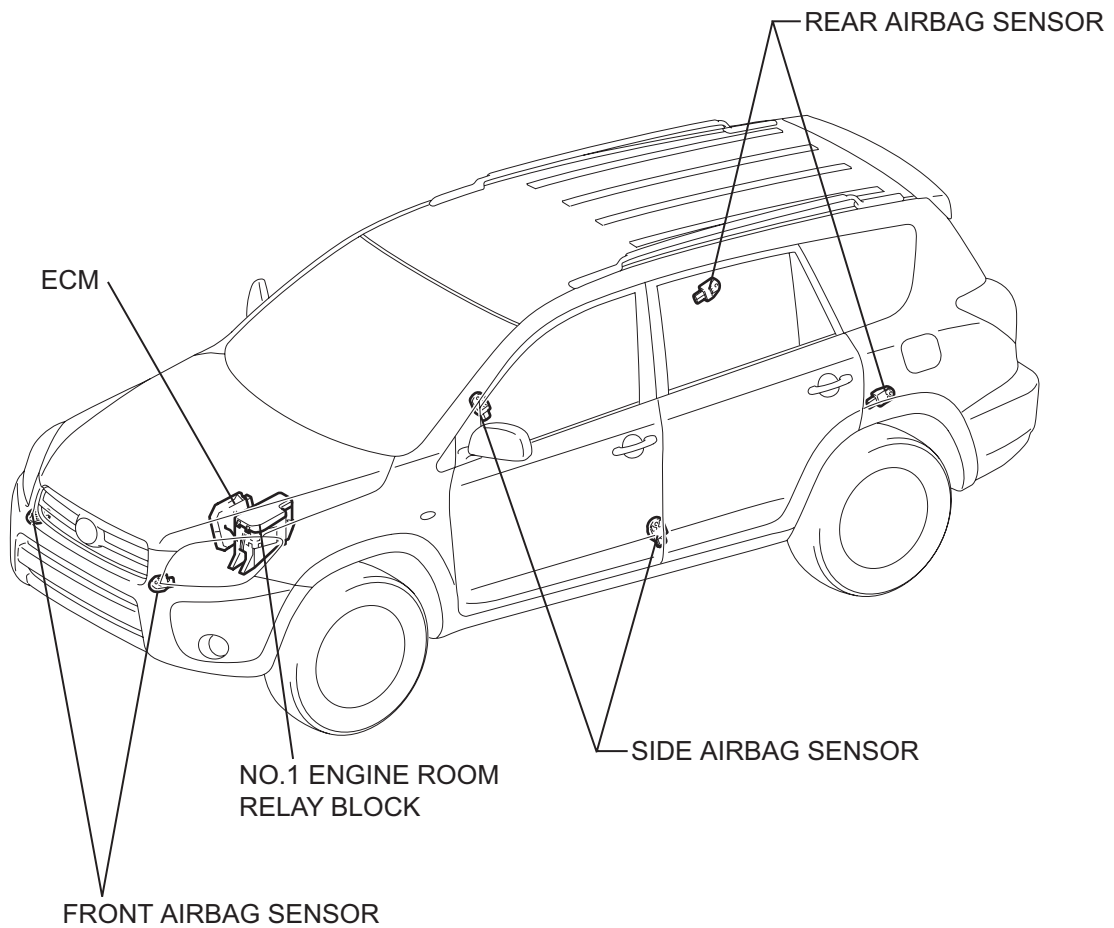
- Connect the connector as shown in the illustration (When locking, make sure that the outer returns to its original position and a click sound can be heard).

HINT:

When connecting, the outer slides. Do not hold the outer while connecting, as it may result in an insecure fit.

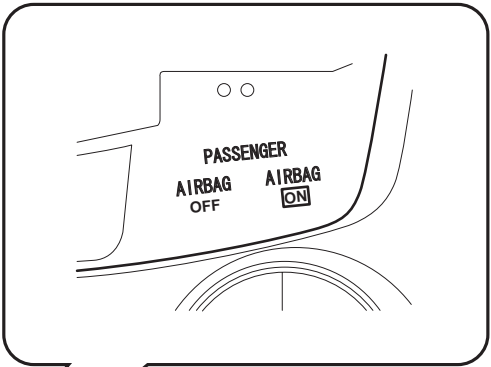
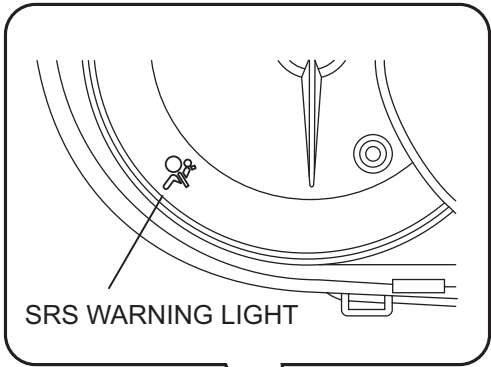


## PARTS LOCATION

**RS**

COMBINATION METER

PASSENGER AIRBAG ON / OFF INDICATOR



SPIRAL CABLE

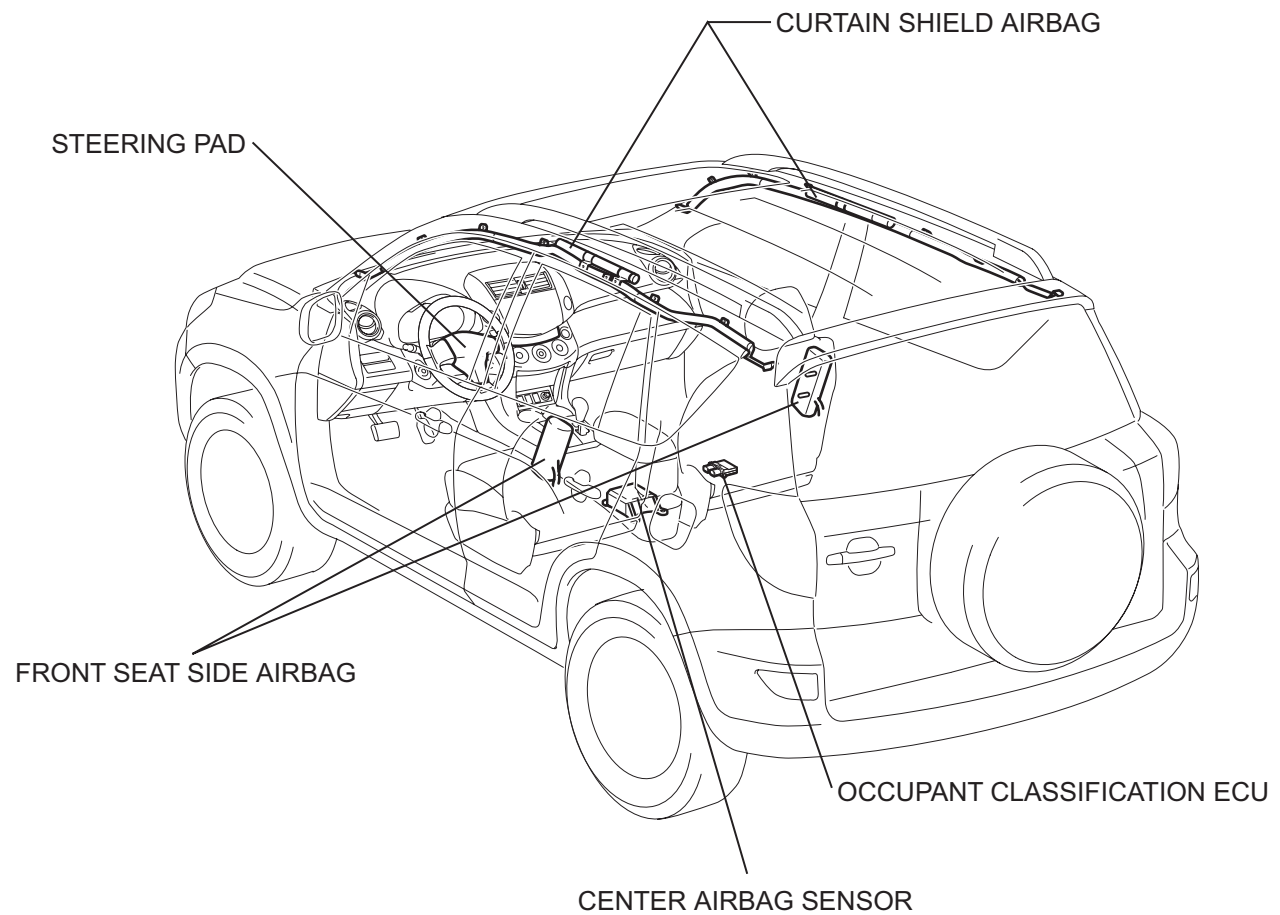
FRONT PASSENGER

FRONT SEAT INNER BELT LH

SEAT POSITION SENSOR

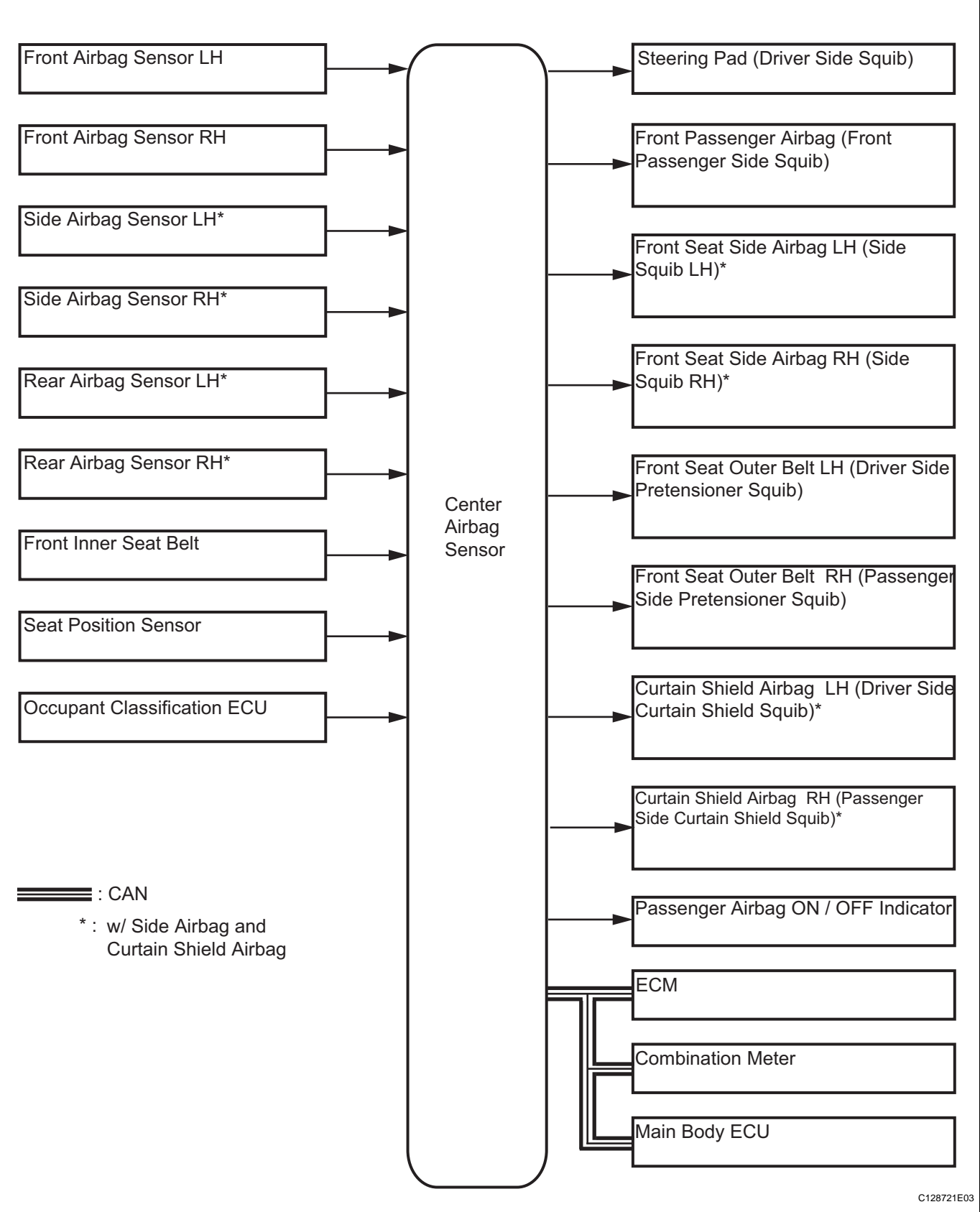
FRONT SEAT OUTER BELT

RS



RS

SYSTEM DIAGRAM



RS



## SYSTEM DESCRIPTION

### 1. GENERAL

- (a) In conjunction with an impact absorbing structure for a frontal collision, the SRS (Supplemental Restraint System) driver airbag, front passenger airbag and driver side knee airbag were designed to supplement seat belts in the event of a frontal collision in order to help reduce shock to the head, chest and knee of the driver and front passenger. This system is a 3-sensor type airbag system to detect the impact during a frontal collision using the center airbag sensor and front airbag sensors. It also operates the airbag system and seat belt pretensioner.
- (b) In order to detect the extent of the collision during the initial stages of the collision in further detail, the front airbag sensors have been changed from mechanical type to electrical type deceleration sensors. Accordingly, the deployment of the driver airbag and front passenger airbag is controlled in two stages according to the severity of the impact.
- (c) In conjunction with an impact absorbing structure for a side collision, the side airbag and curtain shield airbag were designed to help reduce shock to the driver and front passenger in the event of a side collision.
- (d) A curtain shield airbag that helps reduce shock to the front and rear seat occupants with a single curtain shield airbag has been adopted. In conjunction with this system, the side airbag sensors have been installed at the bottom of the center pillars and rear airbag sensors have been installed at the bottom of the rear pillars.
- (e) In this system, a front side collision is detected by the side airbag sensor in order to simultaneously deploy the side airbag. A rear side collision is detected by the rear airbag sensor and the center airbag sensor in order to deploy the side airbag and curtain shield airbag.
- (f) The center airbag sensor sends the airbag deployment signal to the ECM through the CAN (Controller Area Network) to operate the fuel pump control.

### 2. CONSTRUCTION AND OPERATION

- (a) FRONT AIRBAG SENSOR
  - (1) The front airbag sensors are installed on the right and left radiator supports.
  - (2) The front airbag sensor consists of the deceleration sensor.

- (3) The deceleration sensor is built into the front airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a frontal collision. Accordingly, the extent of the initial collision can be detected in detail.
- (b) **SIDE AIRBAG SENSOR**
  - (1) The side airbag sensors are installed on the bottom of the right and left center pillars.
  - (2) The side airbag sensor consists of the deceleration sensor and ignition control circuit.
  - (3) The deceleration sensor is built into the side airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a front side collision. Accordingly, the extent of the initial collision can be detected in detail.
- (c) **REAR AIRBAG SENSOR**
  - (1) The rear airbag sensors are installed on the right and left rear pillars.
  - (2) The rear airbag sensor consists of the deceleration sensor and ignition control circuit.
  - (3) The deceleration sensor is built into the rear airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a rear side collision. Accordingly, the extent of the initial collision can be detected in detail.
- (d) **CENTER AIRBAG SENSOR**
  - (1) **General**
    - The center airbag sensor is installed on the center floor under the console box.
    - The center airbag sensor consists of the deceleration sensor, safing sensor, electronic safing sensor, ignition control circuit and diagnostic circuit.
    - The center airbag sensor receives signals from the deceleration sensor and safing sensor built into the center airbag sensor and front airbag sensor. Then the center airbag sensor determines whether or not the driver airbag, front passenger airbag, driver side knee airbag and seat belt pretensioner should be activated, and diagnoses system malfunctions.
    - The center airbag sensor causes the side airbag and the curtain shield airbag to deploy when receiving signals from the side and rear airbag sensor.

- The center airbag sensor receives signals from the deceleration sensor and the electronic safing sensor built into the center airbag sensor and the rear airbag sensor, and determines whether or not the side airbag and curtain shield airbag should be activated, and diagnoses system malfunctions.
- The center airbag sensor sends the airbag deployment signal to ECM through the CAN to operate the fuel pump control.

(2) Deceleration sensor and ignition control circuit

- The deceleration sensor is built into the center airbag sensor.
- The ignition control circuit performs calculations based on the signal output from the deceleration sensors of the center airbag sensor and front airbag sensor. If the calculated values are greater than the specified values, it activates the deployment operation.

(3) Safing sensor

The safing sensor is built into the center airbag sensor. During a frontal collision, the sensor turns on and outputs an ON signal to the center airbag sensor if a deceleration rate greater than the specified value is applied to the safing sensor.

(4) Electronic safing sensor

The electronic safing sensor is built into the center airbag sensor. During a side collision, the sensor turns on and outputs an ON signal to the center airbag sensor if a deceleration rate greater than the specified value is applied to the electronic safing sensor.

(5) Back-up power source

The back-up power source consists of a power supply capacitor and a DC-DC converter. When the power system does not function during a collision, the power supply capacitor discharges and supplies electric power to the system. The DC-DC converter operates as a boosting transformer when the battery voltage falls below a predetermined level.

(6) Diagnostic circuit

This circuit constantly diagnoses system malfunctions. When a malfunction is detected, it lights up the SRS warning light on the telltale light to inform the driver.

(7) Memory circuit

When a malfunction is detected in the diagnostic circuit, it is coded and stored in the memory circuit.

## (e) SRS WARNING LIGHT

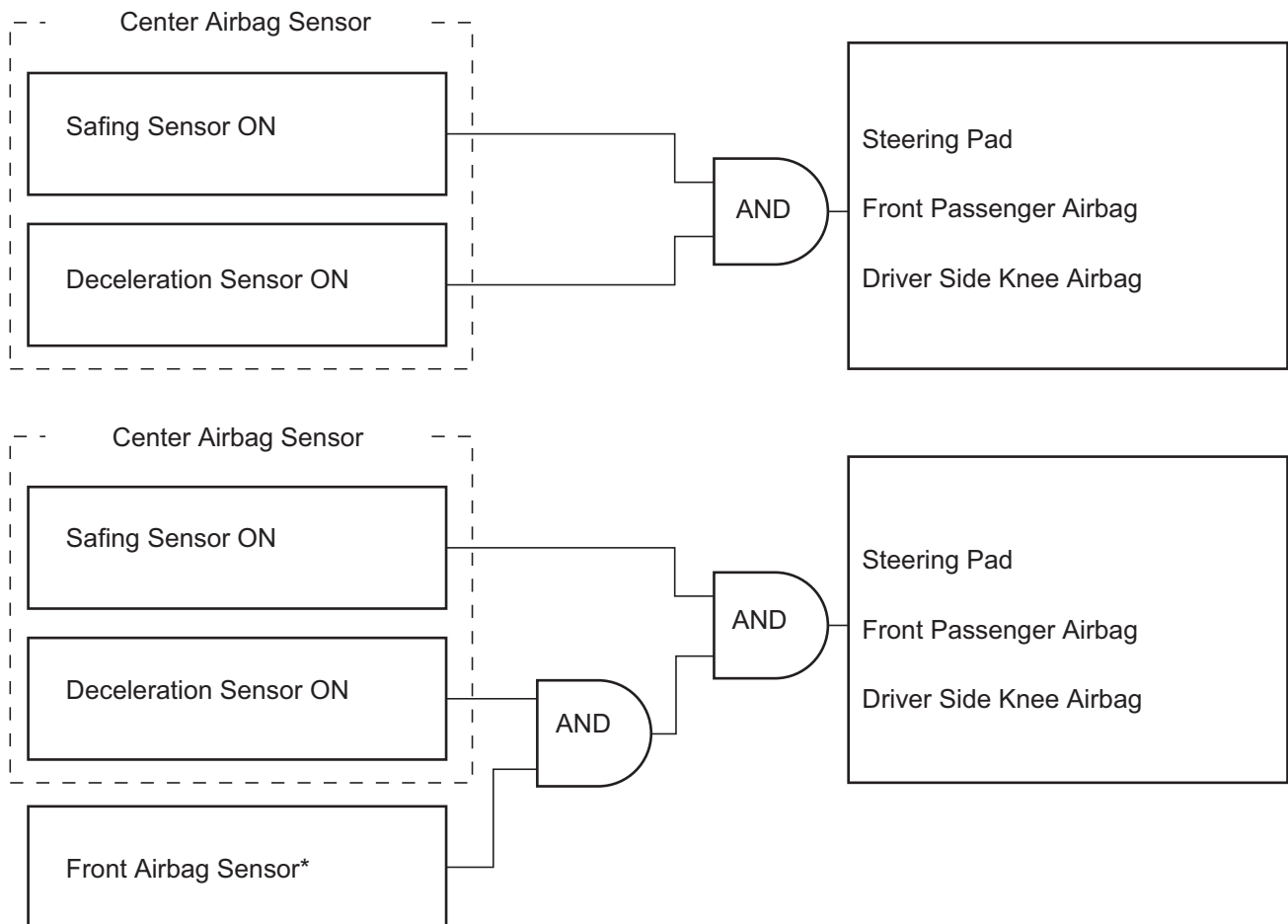
- (1) The SRS warning light is located on the telltale light. It comes on to inform the driver of system trouble when a malfunction is detected in the self-diagnosis of the center airbag sensor. Under normal operating conditions when the ignition switch is turned on, it comes on for approximately 6 seconds and then goes off.

**3. DEPLOYMENT CONDITION**

When the vehicle collides and the shock is greater than the specified value, the SRS is activated automatically. The center airbag sensor includes the safing sensor and deceleration sensor. The safing sensor was designed to be turned on at a smaller deceleration rate than the deceleration sensor.

- (a) The center airbag sensor determines whether or not deployment is necessary based on signals from the deceleration sensor and the front airbag sensor\*. If the safing sensor turns on simultaneously, current flows to the squibs to deploy the SRS as shown in the illustration below.

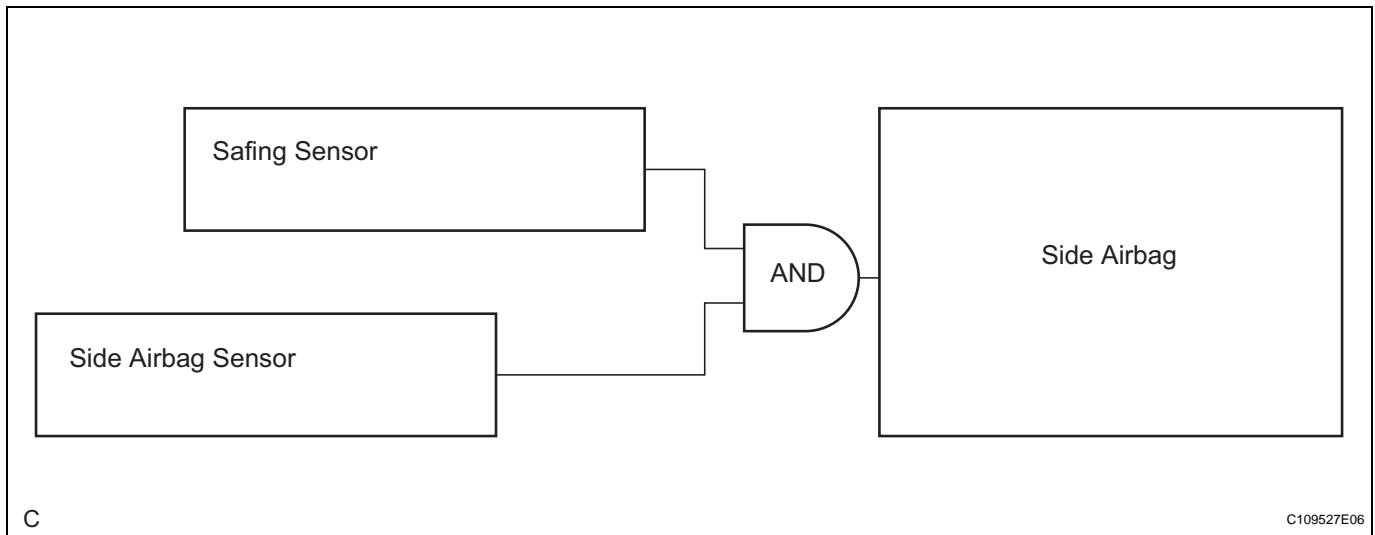
RS



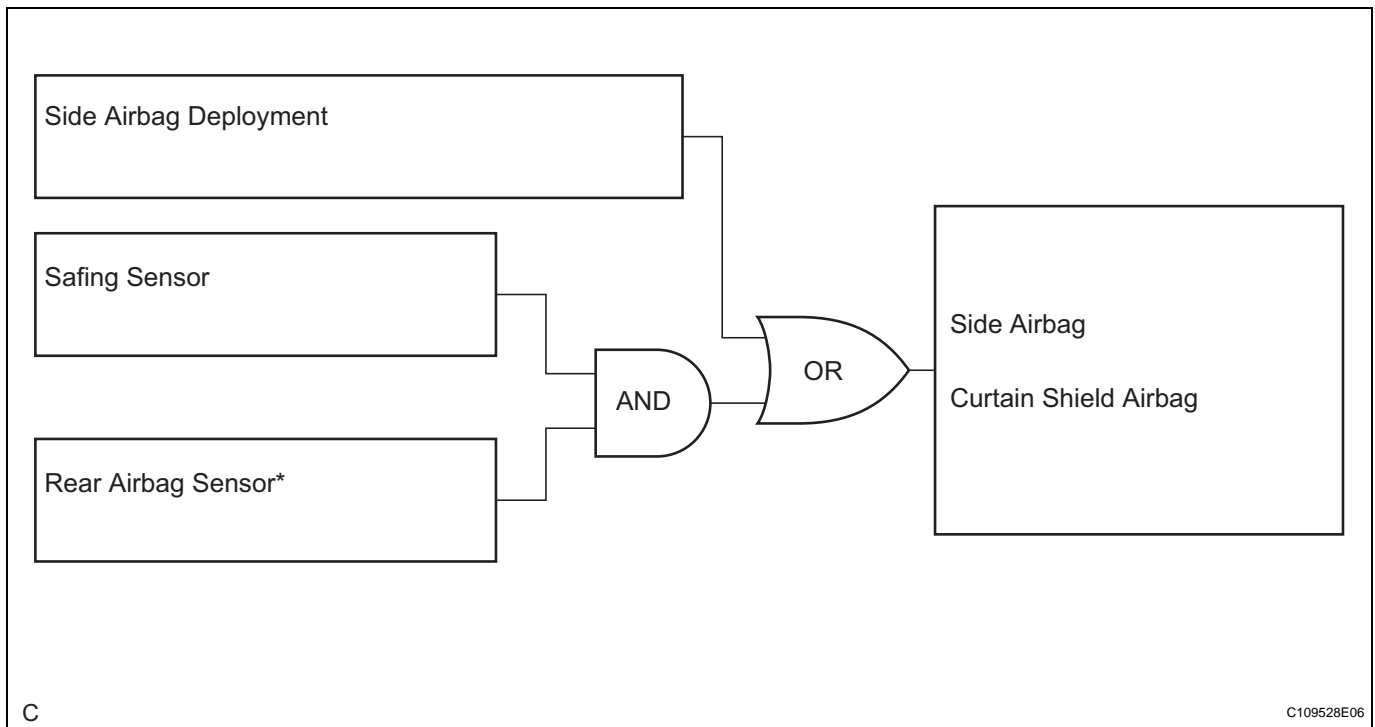
HINT:

\* : In case of a frontal collision, the ignition signal could be output with the deceleration sensor ON signal even without a signal from the front airbag sensor.

- (b) The center airbag sensor determines whether or not deployment is necessary based on signals from the side airbag sensor. If the safing sensor turns on simultaneously, current flows to the squib to deploy the SRS as shown in the illustration below.



- (c) The center airbag sensor determines whether or not deployment is necessary based on signals from the rear airbag sensor. If the safing sensor turns on simultaneously, current flows to the squib to deploy the SRS as shown in the illustration below\*.

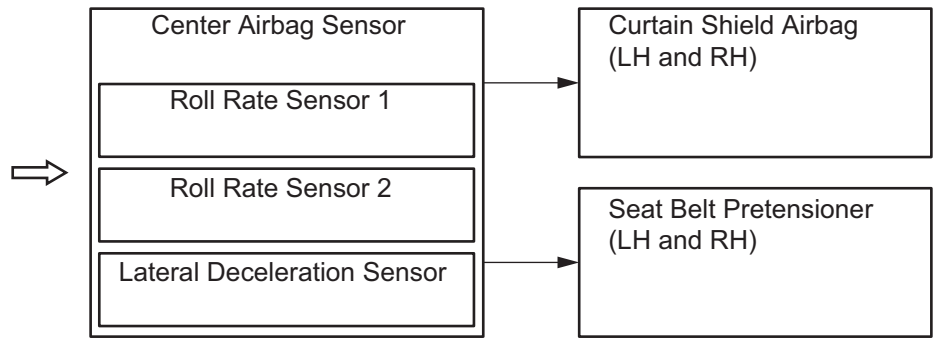
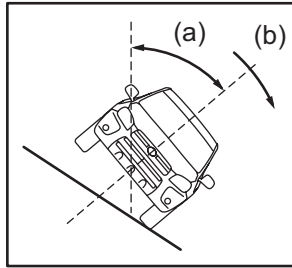


## HINT:

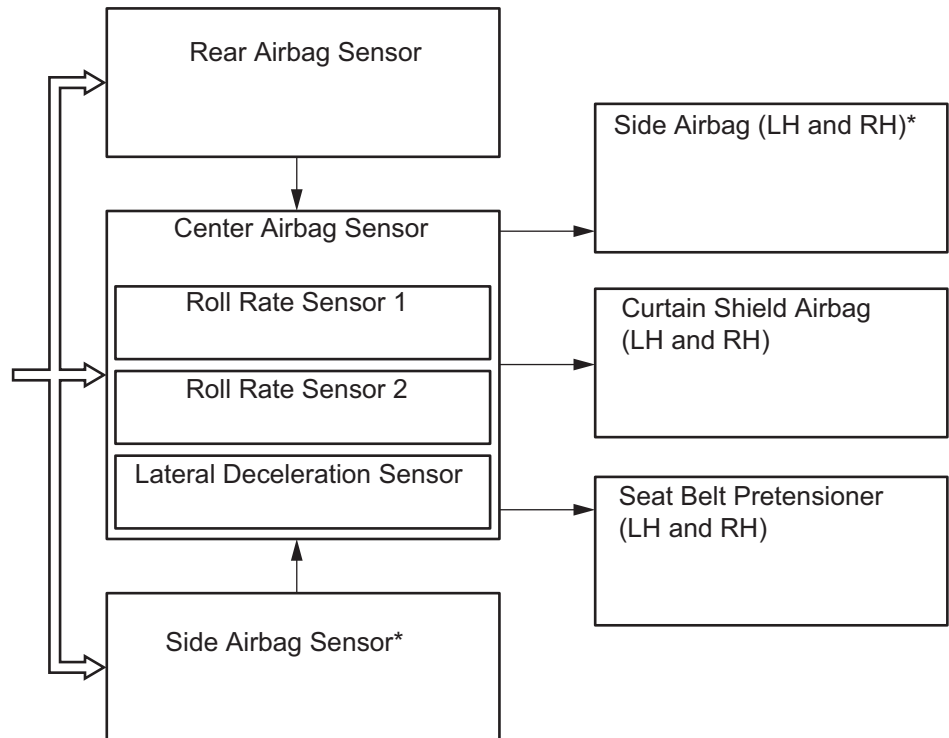
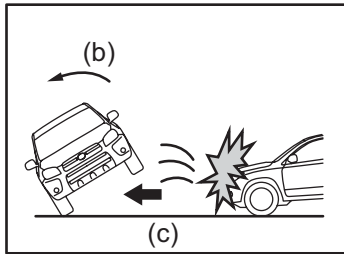
\*: If the side airbag deploys, the curtain shield airbag will also deploy, regardless of whether the signal is output from the rear airbag sensor.

- (d) The center airbag sensor contains a roll rate sensor and roll rate sensor (that determine the inclination angle the vehicle) and a lateral deceleration sensor (that determine the lateral force that is applied to the vehicle). These sensors detect the vehicle's roll angle (a), rotational speed (b), and lateral acceleration speed (c). Based on the information obtained from sensors, the airbag sensor makes an overall judgment of the vehicle's roll angle (a), rotational speed (b), and lateral acceleration speed (c). If the airbag sensor determines that the vehicle has rolled over due to cause other than the side collision, it deploys the right and left curtain shield airbag and the front right and left seat belt pretensioner.

## Roll Over Detection



## Side Collision and Rollover Detection



\* Activate depending on the condition of the collision.

# HOW TO PROCEED WITH TROUBLESHOOTING

- HINT:
- Use these procedures to troubleshoot the supplemental restraint system.
  - \*: Use the intelligent tester.

1

VEHICLE BROUGHT TO WORKSHOP

NEXT

2

INSPECT BATTERY VOLTAGE\*

Standard voltage:  
11 to 14 V  
If the voltage is below 11 V, recharge or replace the battery before proceeding.

3

CHECK MULTIPLEX COMMUNICATION SYSTEM\*

- (a) Check the DTC.  
Result

Result	Proceed to
DTC is not output	A
DTC is output	B

RS

B

CHECK MULTIPLEX COMMUNICATION SYSTEM

A

4

CHECK CAN COMMUNICATION SYSTEM

- (a) Check the DTC.  
Result

Result	Proceed to
DTC is not output	A
DTC is output	B

A

B

CHECK CAN COMMUNICATION CIRCUIT



**5** WARNING LIGHT CHECK\*

NEXT

**6** CHECK FOR DTC (Present and Past DTCs)

(a) Check the DTC.

**Result**

Result	Proceed to
DTC is not output	A
DTC is output	B

**B****PROBLEM SYMPTOMS TABLE****A****7** DTC CHART

NEXT

**8** CIRCUIT INSPECTION

NEXT

**9** REPAIR\*

NEXT

**10** CLEAR DTC (Present and Past DTCs)\*

NEXT

**11** CHECK FOR DTC (Present and Past DTCs)

(a) Check the DTC.

**Result**

Result	Proceed to
DTC is not output	A
DTC is output	B

**B****Go to step 6****RS**

A

12	CONFIRMATION TEST
----	-------------------

NEXT

END
-----

## PROBLEM SYMPTOMS TABLE

**HINT:**

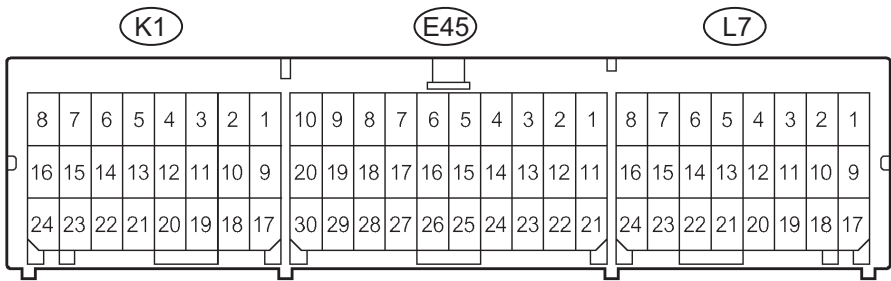
- Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "Suspected area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.
- Proceed to the troubleshooting procedures for each circuit in the table below.

**Airbag system**

Symptom	Suspected area	See page
1. The SRS warning light goes off after the primary check, but comes back on.	SRS Warning Light Remains ON	<a href="#">RS-226</a>
2. With the ignition switch ON, the SRS warning light sometimes comes back on.	SRS Warning Light Remains ON	<a href="#">RS-226</a>
3. The SRS warning light always comes on even when DTC is not output.	SRS Warning Light Remains ON	<a href="#">RS-226</a>
1. With the ignition switch ON, the SRS warning light does not come on.	SRS Warning Light does not Come On	<a href="#">RS-230</a>
1. Although an SRS warning light operates normally, DTC is output.	TC and CG Terminal Circuit	<a href="#">RS-233</a>
2. Although terminals TC and CG of DLC3 are not connected, DTC is output.	TC and CG Terminal Circuit	<a href="#">RS-233</a>

TERMINALS OF ECU

1. CENTER AIRBAG SENSOR ASSEMBLY (w/ Curtain Shield Airbag)



H

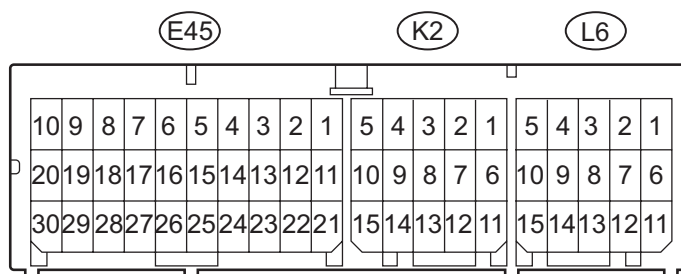
C109532E05

Terminal No.	Terminal Symbol	Destination
K1-1	SFD+	Front seat side airbag assembly LH (Side squib LH)
K1-2	SFD-	Front seat side airbag assembly LH (Side squib LH)
K1-3	ICD-	Curtain shield airbag assembly LH (Driver side curtain shield squib)
K1-4	ICD+	Curtain shield airbag assembly LH (Driver side curtain shield squib)
K1-5	PD+	Front seat outer belt assembly LH (Driver side pretensioner squib)
K1-6	PD-	Front seat outer belt assembly LH (Driver side pretensioner squib)
K1-9	DSP+	Seat position sensor
K1-10	DBE+	Front seat inner belt assembly LH
K1-17	DSP-	Seat position sensor
K1-18	DBE-	Front seat inner belt assembly LH
K1-23	BBD-	Side airbag sensor LH
K1-24	BBD+	Side airbag sensor LH
E45-1	P2+	Front passenger airbag (Front passenger side squib 2nd step)
E45-2	P2-	Front passenger airbag (Front passenger side squib 2nd step)
E45-3	P-	Front passenger airbag (Front passenger side squib)
E45-4	P+	Front passenger airbag (Front passenger side squib)
E45-5	D+	Steering pad (Driver side squib)
E45-6	D-	Steering pad (Driver side squib)

Terminal No.	Terminal Symbol	Destination
E45-7	D2-	Steering pad (Driver side squib 2nd step)
E45-8	D2+	Steering pad (Driver side squib 2nd step)
E45-13	CANH	CAN
E45-16	SIL	DLC3
E45-17	P-AB	Front passenger seat belt warning light (Passenger airbag ON/OFF indicator)
E45-21	IG2	IGN fuse
E45-22	CANL	CAN
E45-23	PAON	Front passenger seat belt warning light (Passenger airbag ON/OFF indicator)
E45-25	E1	Ground
E45-26	E2	Ground
E45-27	-SR	Front airbag sensor RH
E45-28	-SL	Front airbag sensor LH
E45-29	+SR	Front airbag sensor RH
E45-30	+SL	Front airbag sensor LH
L7-3	PP-	Front seat outer belt assembly RH (Front passenger side pretensioner squib RH)
L7-4	PP+	Front seat outer belt assembly RH (Front passenger side pretensioner squib RH)
L7-5	ICP+	Curtain shield airbag assembly RH (Curtain shield squib RH)
L7-6	ICP-	Curtain shield airbag assembly RH (Curtain shield squib RH)
L7-7	SFP-	Front seat side airbag assembly RH (Side squib RH)
L7-8	SFP+	Front seat side airbag assembly RH (Side squib RH)
L7-16	FSP+	Occupant classification ECU
L7-17	BBP+	Side airbag sensor RH
L7-18	BBP-	Side airbag sensor RH
L7-24	FSP-	Occupant classification ECU

RS

## 2. CENTER AIRBAG SENSOR ASSEMBLY (w/o Curtain Shield Airbag)



Terminal No.	Terminal Symbol	Destination
E45-1	P2+	Front passenger airbag (Front passenger side squib 2nd step)
E45-2	P2-	Front passenger airbag (Front passenger side squib 2nd step)
E45-3	P-	Front passenger airbag (Front passenger side squib)
E45-4	P+	Front passenger airbag (Front passenger side squib)
E45-5	D+	Steering pad (Driver side squib)
E45-6	D-	Steering pad (Driver side squib)
E45-7	D2-	Steering pad (Driver side squib 2nd step)
E45-8	D2+	Steering pad (Driver side squib 2nd step)
E45-13	CANH	CAN
E45-16	SIL	DLC3
E45-17	P-AB	Front passenger seat belt warning light (Passenger airbag ON/OFF indicator)
E45-21	IG2	IGN fuse
E45-22	CANL	CAN
E45-23	PAON	Front passenger seat belt warning light (Passenger airbag ON/OFF indicator)
E45-25	E1	Ground
E45-26	E2	Ground
E45-27	-SR	Front airbag sensor RH
E45-28	-SL	Front airbag sensor LH
E45-29	+SR	Front airbag sensor RH
E45-30	+SL	Front airbag sensor LH
K2-1	PD-	Front seat outer belt assembly LH (Driver side pretensioner squib)
K2-2	PD+	Front seat outer belt assembly LH (Driver side pretensioner squib)
K2-11	DBE+	Front seat inner belt assembly LH
K2-12	DBE-	Front seat inner belt assembly LH
K2-13	DSP-	Seat position sensor
K2-14	DSP+	Seat position sensor
L6-4	PP+	Front seat outer belt assembly RH (Front passenger side pretensioner squib RH)
L6-5	PP-	Front seat outer belt assembly RH (Front passenger side pretensioner squib RH)
L6-12	FSP+	Occupant classification ECU
L6-13	FSP-	Occupant classification ECU

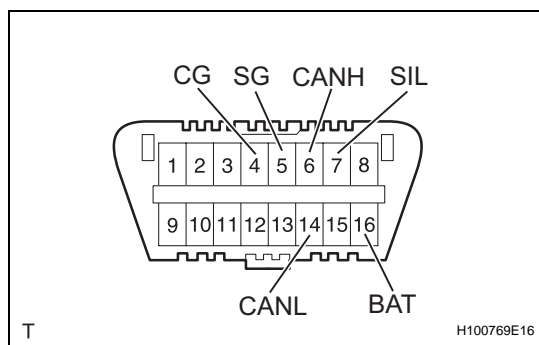
## DIAGNOSIS SYSTEM

### 1. DESCRIPTION

The center airbag sensor controls the functions of the Supplemental Restraint System (SRS) on the vehicle. Data of the SRS can be read in the Data Link Connector 3 (DLC3) of the vehicle. When the system seems to be malfunctioning, use the intelligent tester to check for a malfunction and perform repairs.

### 2. CHECK DLC3

- (a) The ECU uses ISO 15765-4 for communication. The terminal arrangement of the DLC3 complies with ISO 15031-3 and matches the ISO 15765-4 format.



Symbols (Terminal No.)	Terminal Description	Condition	Specified condition
SIL (7) - SG (5)	Bus + line	During transmission	Pulse generation
CG (4) - Body ground	Chassis ground	Always	Below 1 $\Omega$
SG (5) - Body ground	Signal ground	Always	Below 1 $\Omega$
BAT (16) - Body ground	Battery positive	Always	11 to 14 V
CANH (6) - CANL (14)	HIGH-level CAN bus line	Ignition switch OFF*	54 to 69 $\Omega$
CANH (6) - Battery positive	HIGH-level CAN bus line	Ignition switch OFF*	1 M $\Omega$ or higher
CANH (6) - CG (4)	HIGH-level CAN bus line	Ignition switch OFF*	200 $\Omega$ or higher
CANL (14) - Battery positive	LOW-level CAN bus line	Ignition switch OFF*	1 M $\Omega$ or higher
CANL (14) - CG (4)	LOW-level CAN bus line	Ignition switch OFF*	200 $\Omega$ or higher

#### NOTICE:

\*: Before measuring the resistance, leave the vehicle as is for at least 1 minute and do not operate the ignition switch, any switches or doors.

If the result is not as specified, the DLC3 may have a malfunction. Repair or replace the harness and connector.

#### HINT:

Connect the cable of the intelligent tester (with CAN VIM) to the DLC3, turn the ignition switch ON and attempt to use the tester. If the display indicates that a communication error has occurred, there is a problem either with the vehicle or with the tester.

- If communication is normal when the tester is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when the tool is connected to another vehicle, the problem is probably in the tester itself. Consult the Service Department listed in the tester's instruction manual.

### 3. SYMPTOM SIMULATION

#### HINT:

The most difficult case in troubleshooting is when no problem symptoms occur. In such a case, a thorough problem analysis must be carried out. A simulation of the same or similar conditions and environment in which the problem occurred in the customer's vehicle should be carried out. No matter how much skill or experience a technician has, troubleshooting without confirming the problem symptoms will lead to important repairs being overlooked and mistakes or delays.

This leads to a standstill in troubleshooting.

- (a) Simulation method: When vibration seems to be the major cause

#### HINT:

Perform this method only during the primary check period (for approximately 6 seconds after the ignition switch is turned ON).

- (1) Use your finger to slightly vibrate the part of the sensor considered to be the problem cause, and check whether the malfunction recurs.

#### HINT:

Wiggling the relays too strongly may result in open relays.

- (2) Gently wiggle the connector.

- (3) Slightly shake the wire harness vertically and horizontally.

The connector joint and fulcrum of the vibration are the major areas to be checked thoroughly.

### 4. FUNCTION OF SRS WARNING LIGHT

- (a) Primary check

- (1) Turn the ignition switch off. Wait for at least 2 seconds, then turn the ignition switch ON. The SRS warning light comes on for approximately 6 seconds and the SRS airbag system diagnosis (including the seat belt pretensioner) is performed.

#### HINT:

If any malfunctions are detected during the primary check, the SRS warning light remains on even after the primary check period has elapsed.

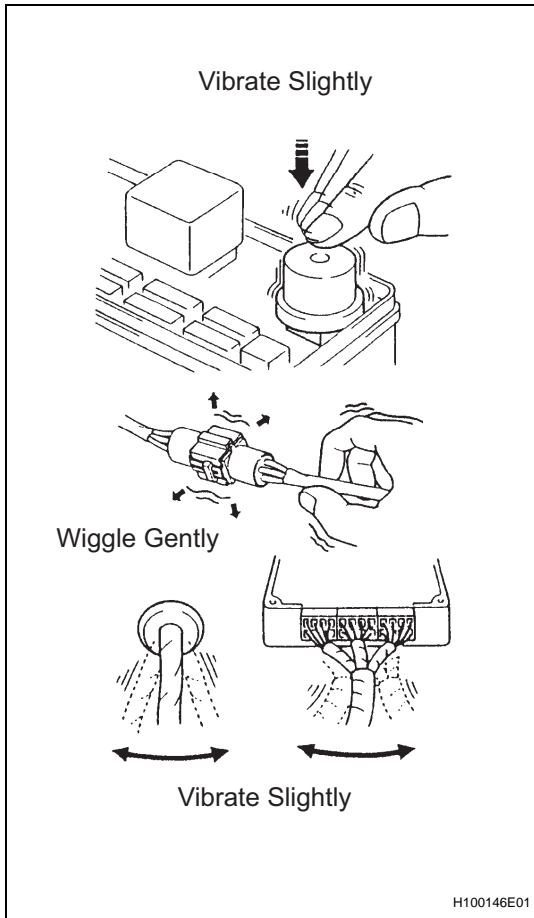
- (b) Constant check

- (1) After the primary check, the center airbag sensor constantly monitors the SRS airbag system for trouble.

#### HINT:

If any malfunctions are detected during the constant check, the center airbag sensor functions as follows:

- The SRS warning light comes on.





- The SRS warning light goes off, and then comes on again. This blinking pattern indicates a source voltage drop. The SRS warning light goes off 10 seconds after the source voltage returns to normal.

(c) Review

(1) When the airbag system is normal:

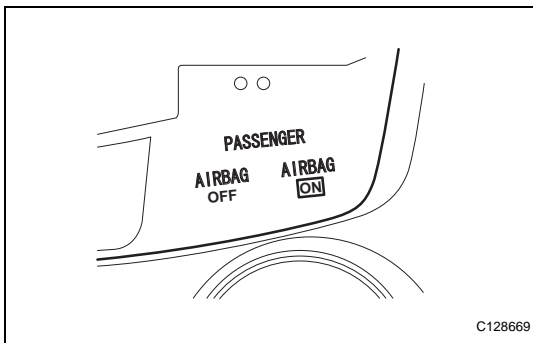
The SRS warning light comes on only during the primary check period (for approximately 6 seconds after the ignition switch is turned ON).

(2) When the airbag system malfunctions:

- The SRS warning light blinks after the primary check period has elapsed.
- The SRS warning light goes off after the primary check, but comes on again during the constant check.
- The SRS warning light remains off even after the ignition switch is turned from LOCK to ON. However, if malfunctions such as an open circuit have occurred in the wire harness between the meter and ECU, the warning light comes on 10 seconds after the ignition switch is turned ON.

**HINT:**

The center airbag sensor keeps the SRS warning light on if any malfunctions have been detected in the airbag system.



## 5. FUNCTION OF PASSENGER AIRBAG ON/OFF INDICATOR

(a) Initial check

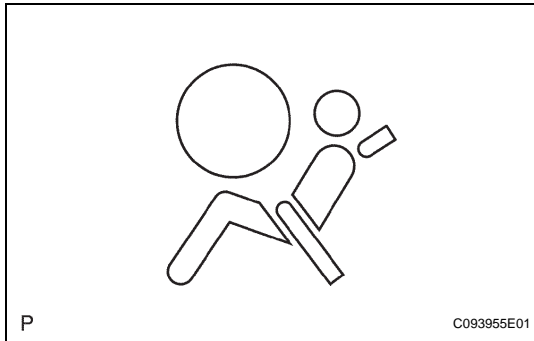
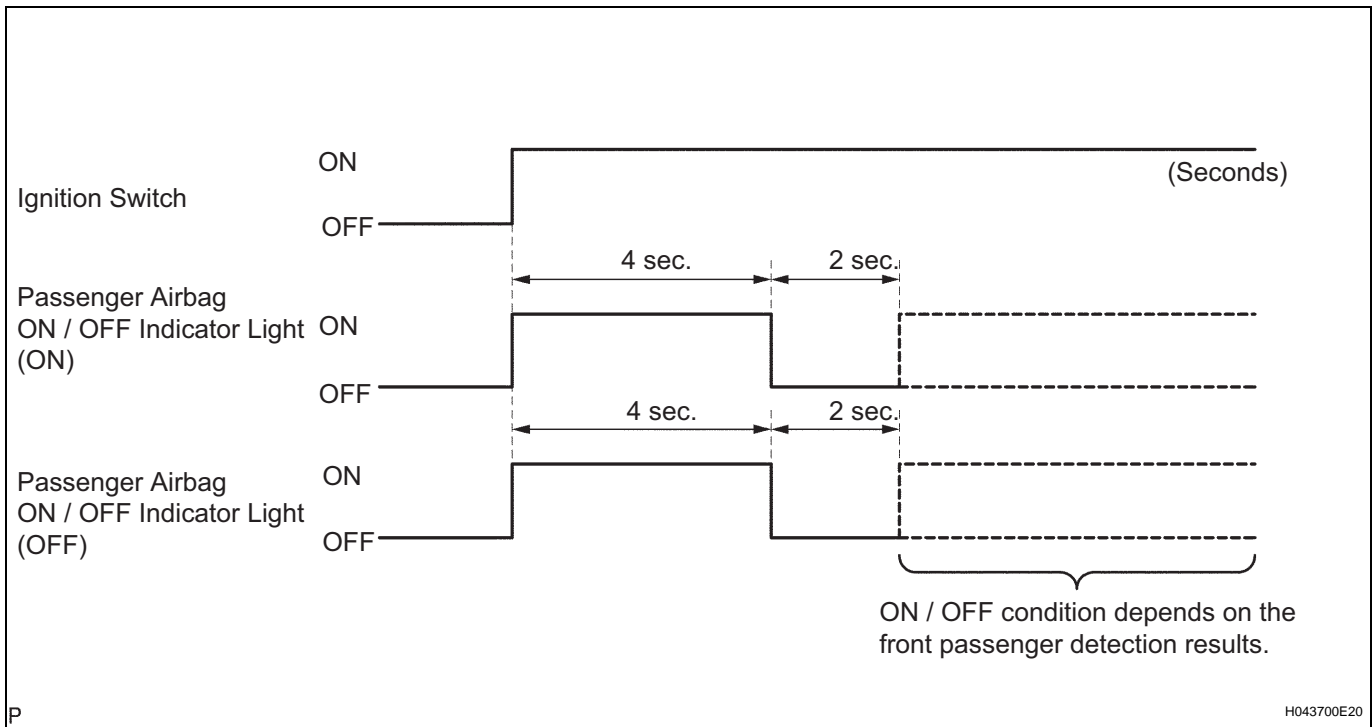
- (1) Turn the ignition switch ON.
- (2) The passenger airbag ON / OFF indicator comes on for approximately 4 seconds, then goes off for approximately 2 seconds.
- (3) Approximately 6 seconds after the ignition switch is turned ON, the passenger airbag ON / OFF indicator operates in accordance with the conditions listed below.

**RS**

Condition	ON Indicator	OFF Indicator
Vacant	OFF	OFF
Adult is seated	ON	OFF
Child is seated	OFF	ON
Child restraint system is set	OFF	ON
Front passenger occupant classification system failure	OFF	ON

**HINT:**

The passenger airbag ON / OFF indicator operates as shown in the timing chart below in order to check the indicator light circuit.



## 6. SRS WARNING LIGHT CHECK

- Turn the ignition switch ON, and check that the SRS warning light comes on for approximately 6 seconds (primary check).
- Check that the SRS warning light goes off approximately 6 seconds after the ignition switch is turned ON (constant check).

### HINT:

When any of the following symptoms occur, refer to the Problem Symptoms Table (see page [RS-34](#)).

- The SRS warning light comes on occasionally after the primary check period has elapsed.
- Even when the SRS warning light comes on, no DTCs are set.
- Even when the ignition switch is turned from OFF to ON, the SRS warning light remains off.

## 7. ACTIVATION PREVENTION MECHANISM

- FUNCTION OF ACTIVATION PREVENTION MECHANISM

- An activation prevention mechanism is built into the connector (on the center airbag sensor a side) of the airbag system squib circuit to prevent accidental airbag activation.
- This mechanism closes the circuit when the connector is disconnected by bringing the short spring into contact with the terminals and shutting off external electricity to prevent accidental airbag activation.

(b) RELEASE METHOD OF ACTIVATION  
PREVENTION MECHANISM

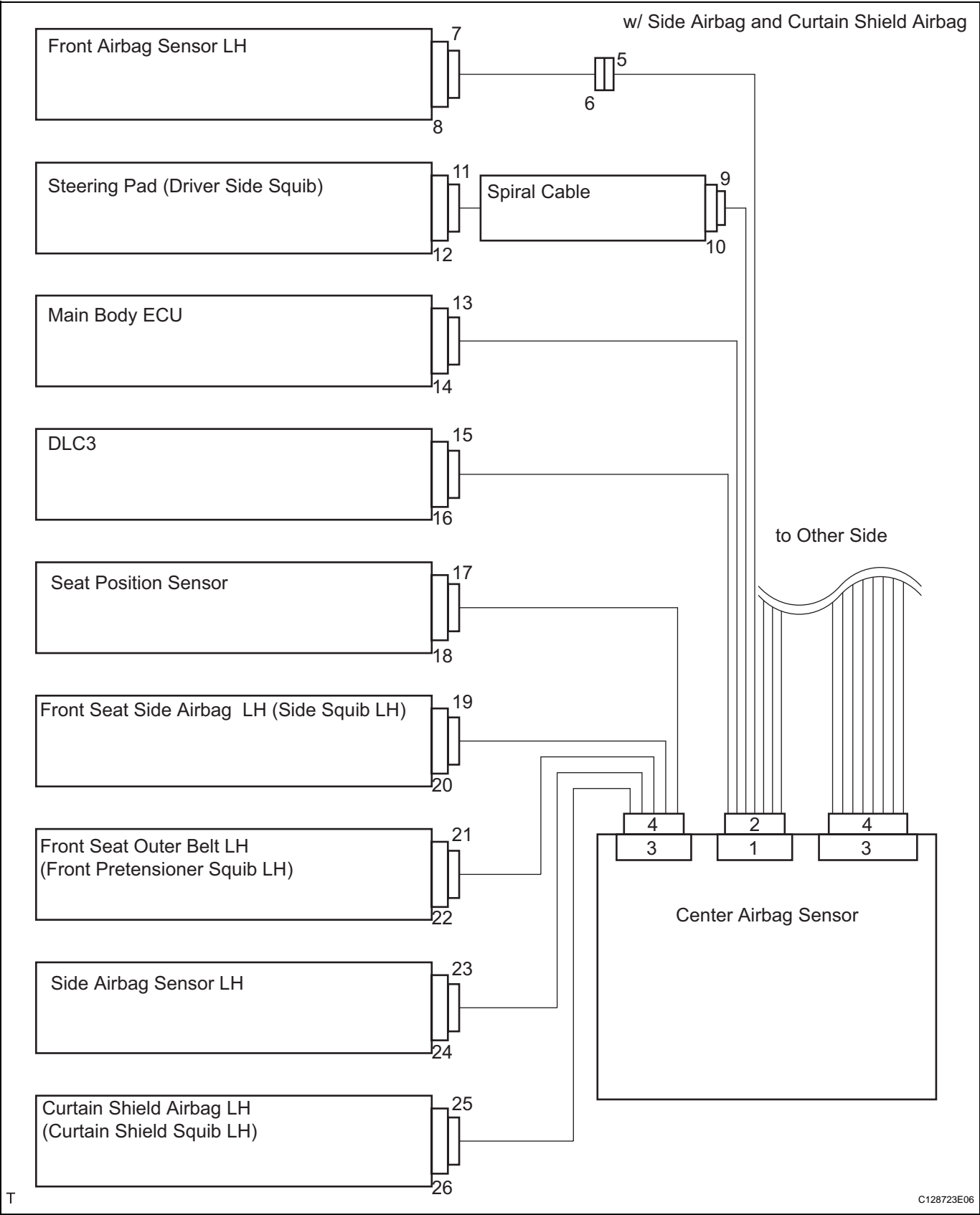
- (1) To release the activation prevention mechanism, insert a piece of paper, with the same thickness as the male terminal (approximately 0.5 mm [0.020 in.]), between the terminals and the short spring to break the connection.
- (2) Refer to the illustrations below concerning connectors to utilize the activation prevention mechanism and its release method.

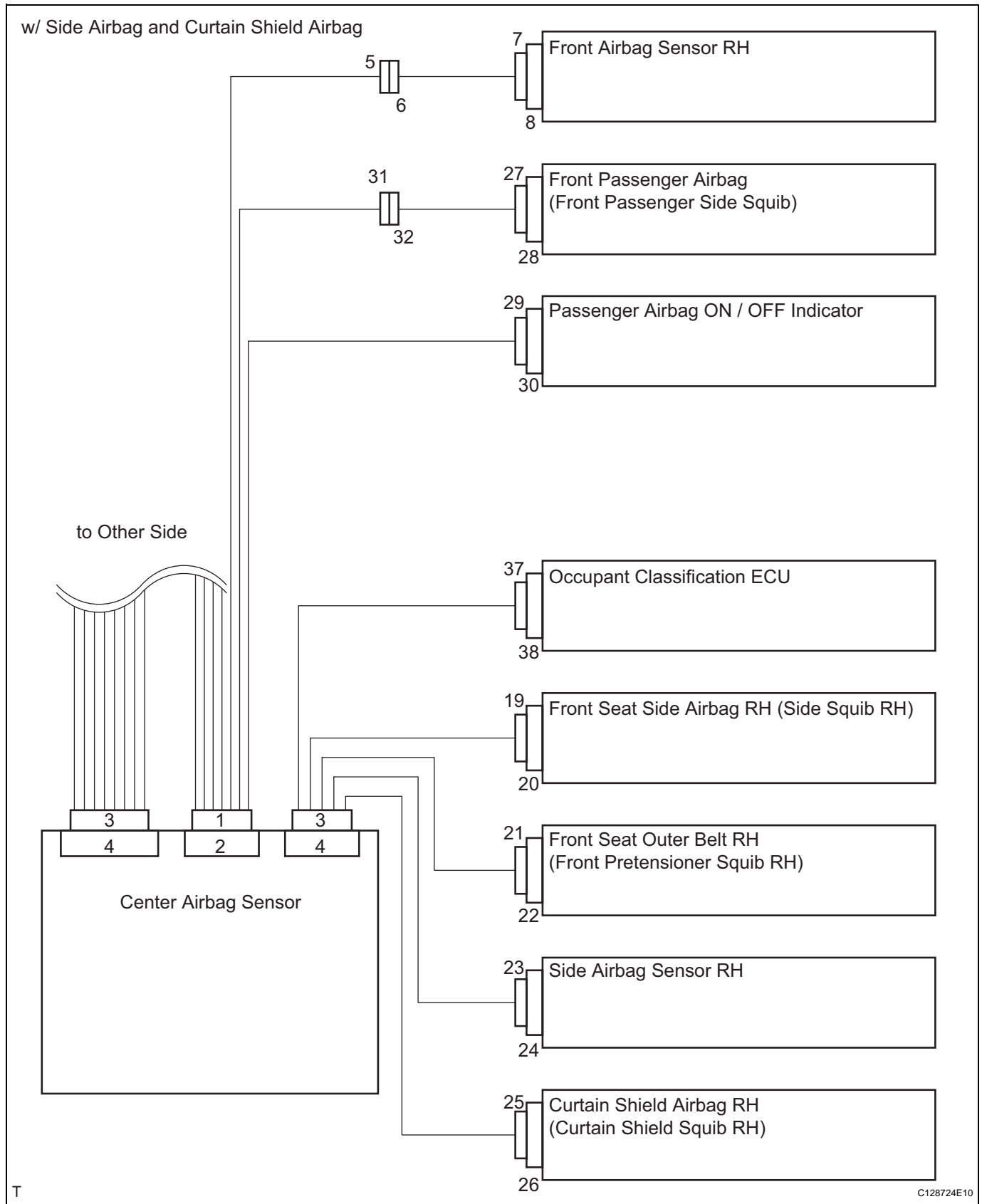
**CAUTION:**

**Never release the activation prevention mechanism on the squib connector even when inspecting with the squib disconnected.**

**NOTICE:**

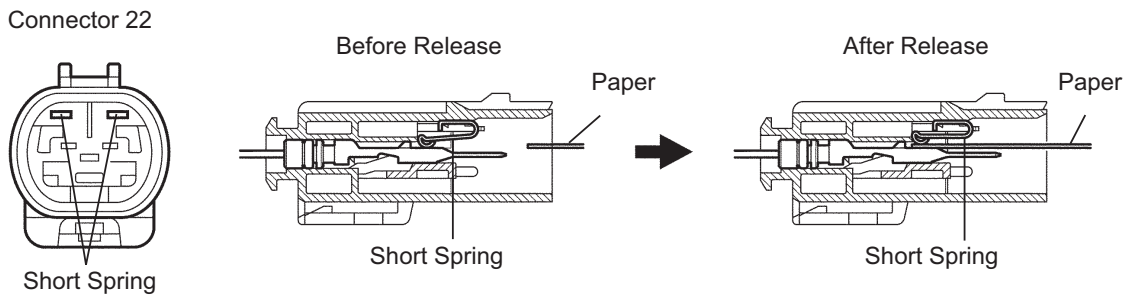
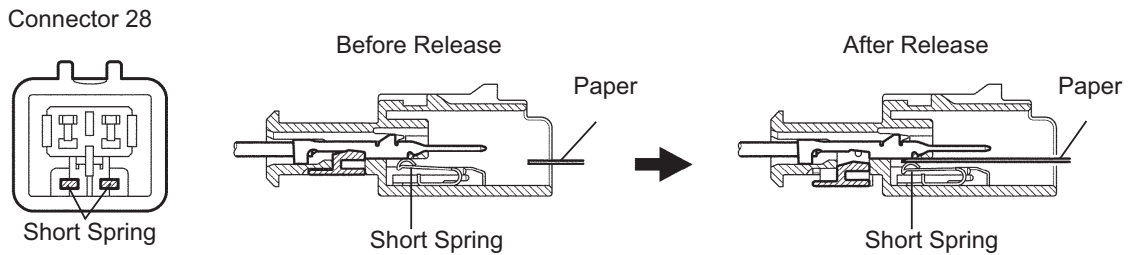
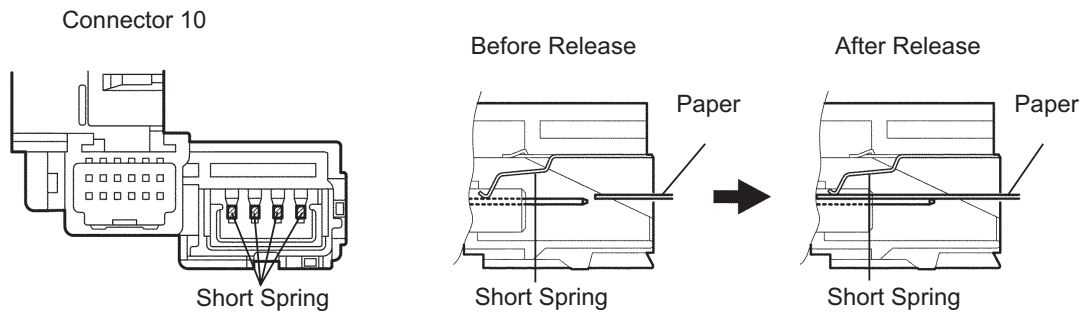
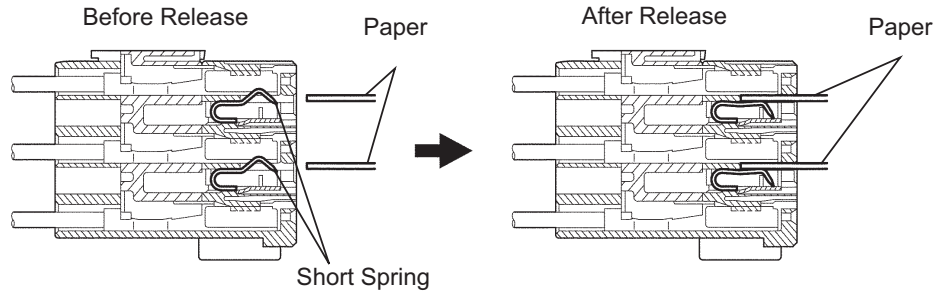
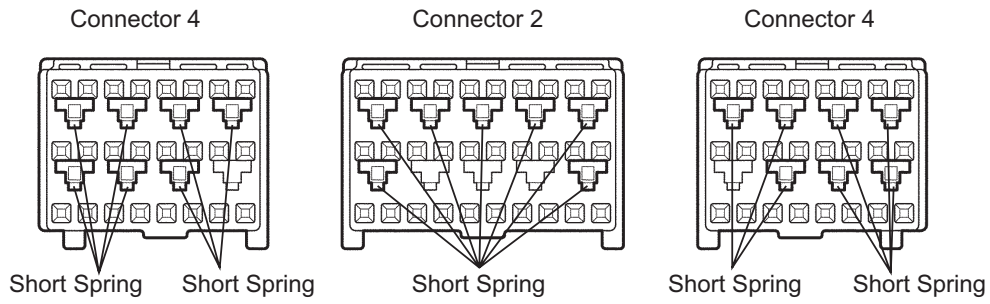
- Do not release the activation prevention mechanism unless specifically directed to do so by the troubleshooting procedure.
- To prevent the terminal and the short spring from being damaged, always use a piece of paper that is the same thickness as the male terminal.





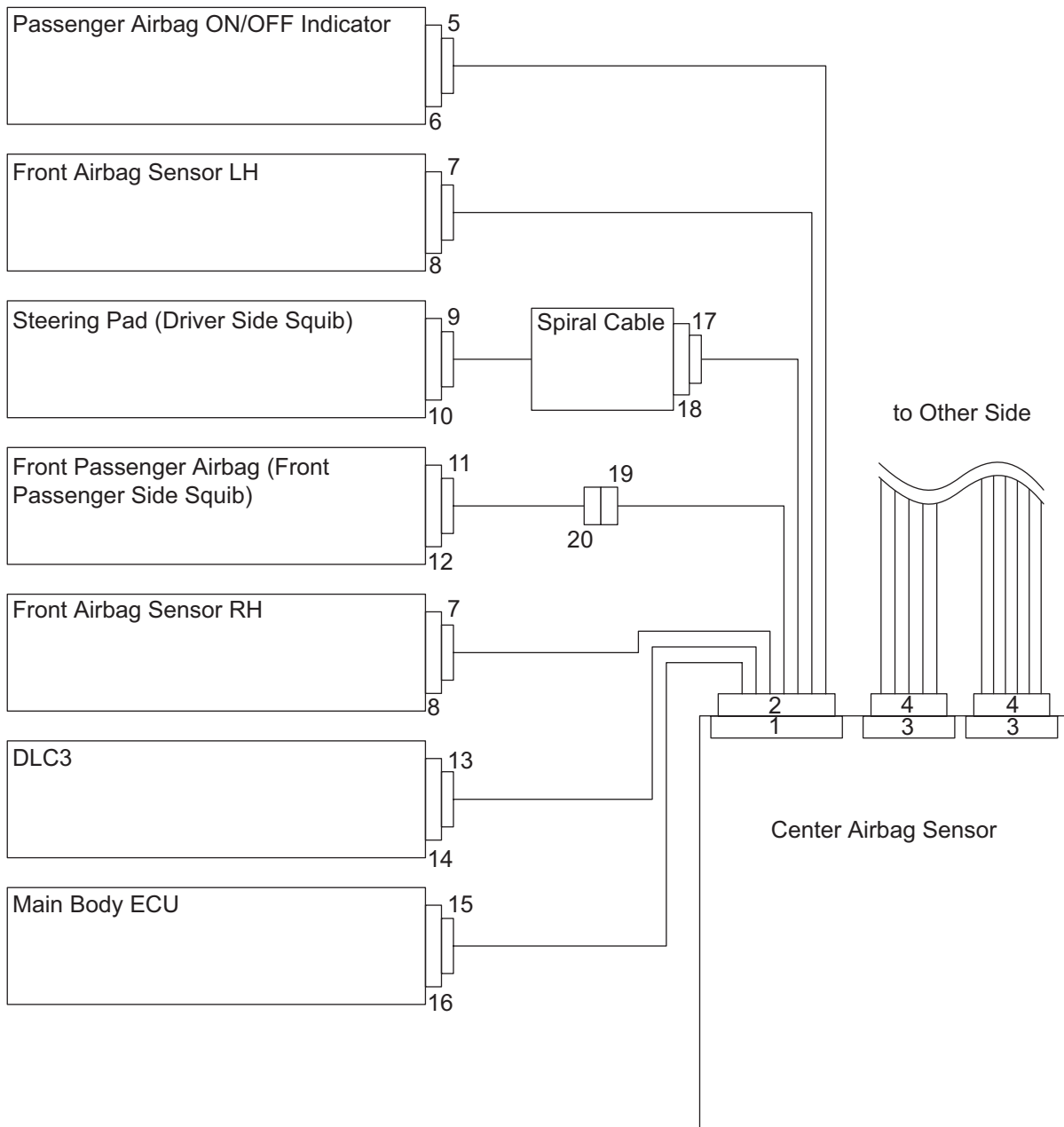
w/ Side Airbag and Curtain Shield Airbag

Center Airbag Sensor Connector



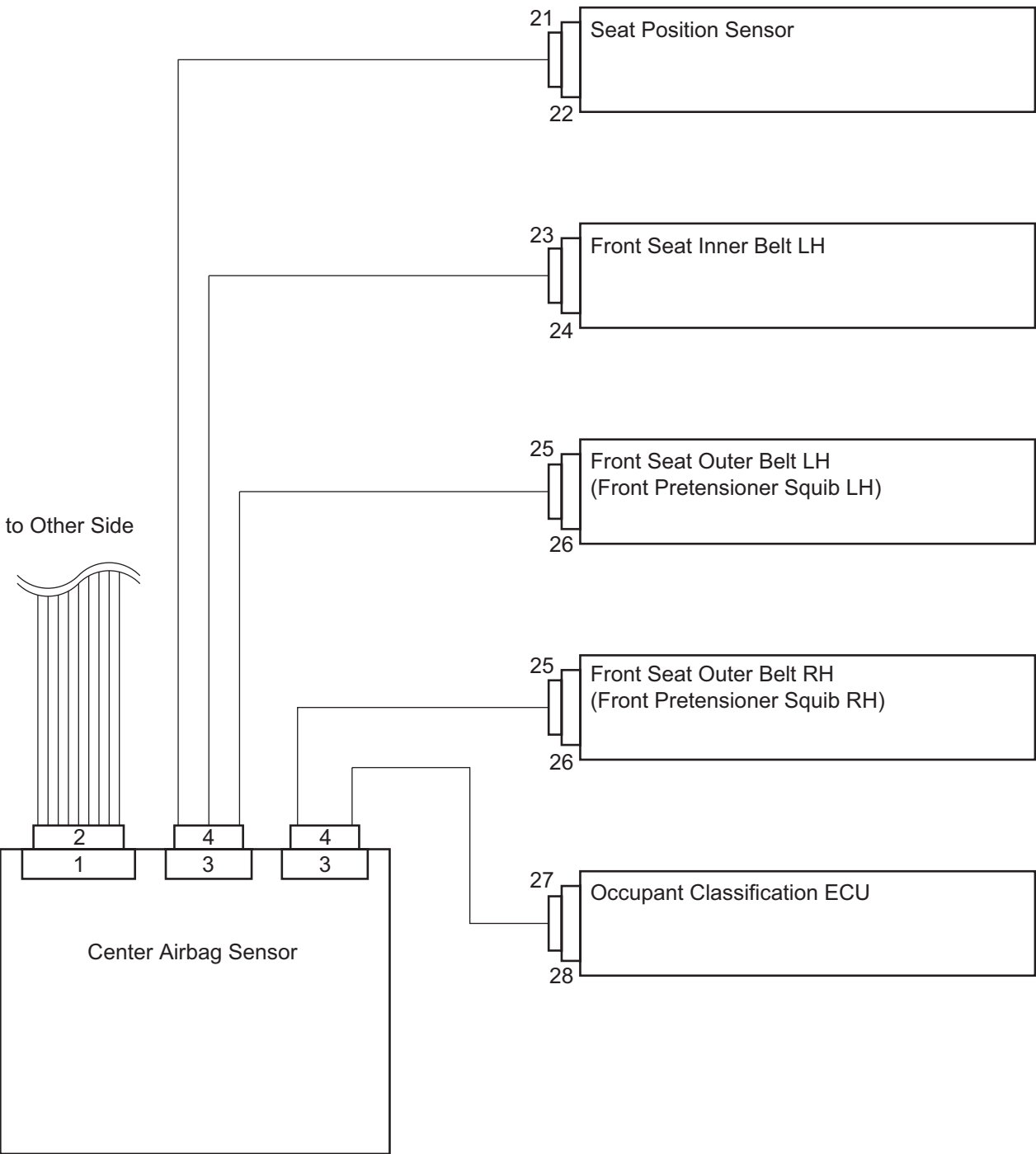
RS

w/o Side Airbag and Curtain Shield Airbag



RS

w/o Side Airbag and Curtain Shield Airbag



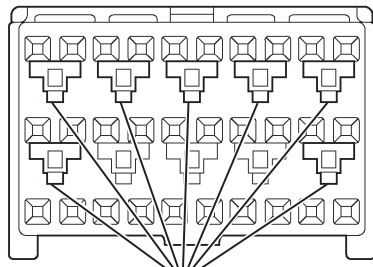
RS



w/o Side Airbag and Curtain Shield Airbag

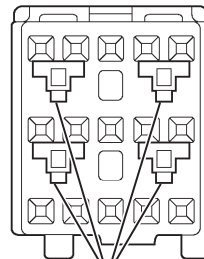
Center Airbag Sensor Connector

Connector 2



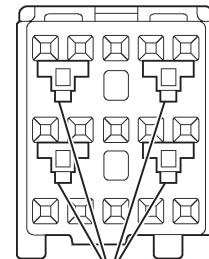
Short Spring

Connector 4



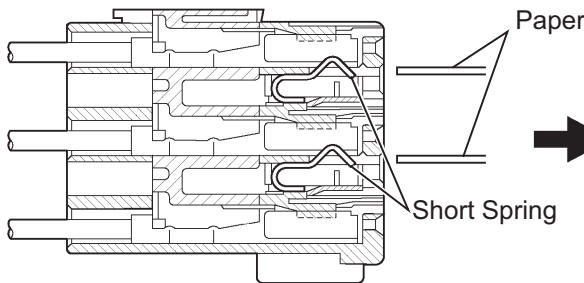
Short Spring

Connector 4

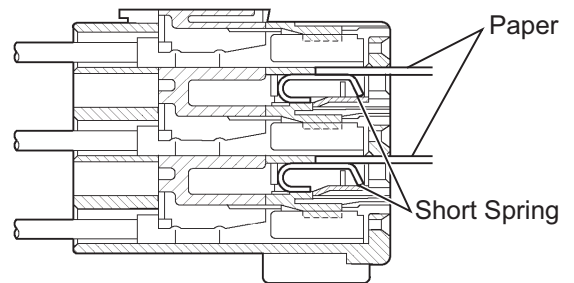


Short Spring

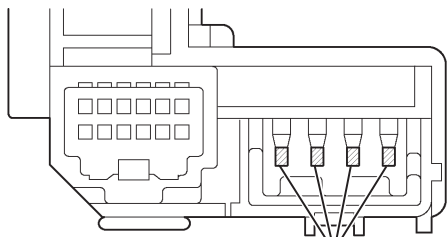
Before Release



After Release

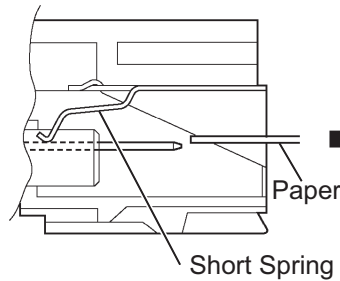


Connector 18

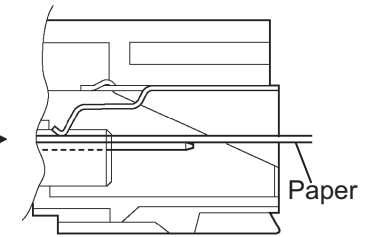


Short Spring

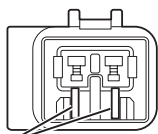
Before Release



After Release

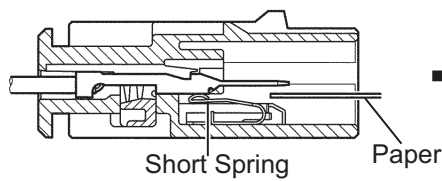


Connector 12

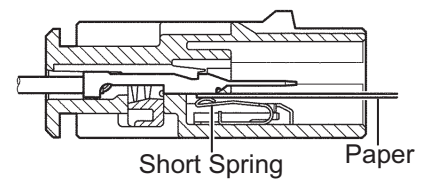


Short Spring

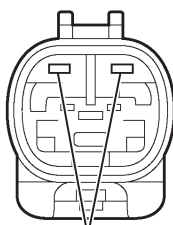
Before Release



After Release

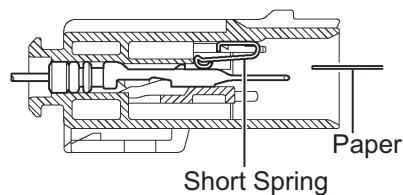


Connector 26

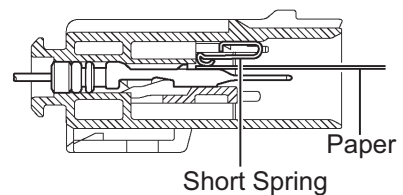


Short Spring

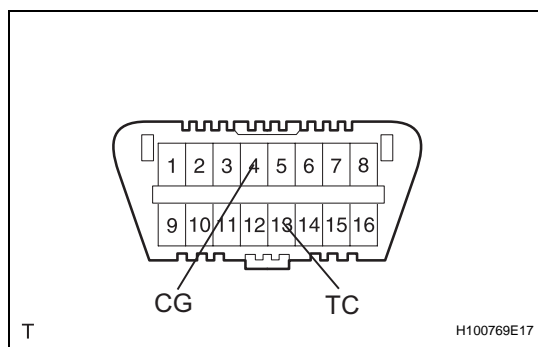
Before Release



After Release



RS



## DTC CHECK / CLEAR

### 1. CHECK DTC (USING SST (CHECK WIRE))

- (a) Check the DTCs (Present trouble code).
  - (1) Turn the ignition switch ON, and wait for approximately 60 seconds.
  - (2) Using SST, connect terminals 13(TC) and 4(CG) of the DLC3.

**SST 09843-18040**

**NOTICE:**

**Connect the terminals to the correct positions to avoid a malfunction.**

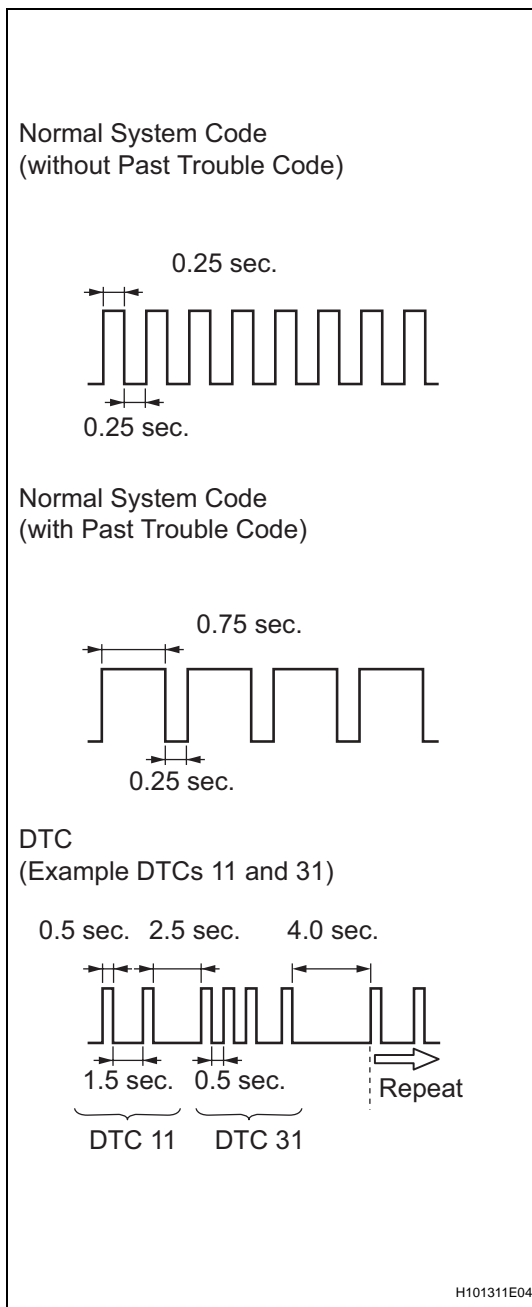
- (b) Check the DTCs (Past trouble code)
  - (1) Using SST, connect terminals TC and 4(CG) of the DLC3.

**SST 09843-18040**

**NOTICE:**

**Connect the terminals to the correct positions to avoid a malfunction.**

- (2) Turn the ignition switch ON, and wait for approximately 60 seconds.



- (c) Read the DTCs.
- (1) Read the blinking patterns of the DTCs. As examples, the blinking patterns for the normal system code and DTCs 11 and 31 are shown in the illustration to the left.
- Normal system code indication (without past trouble code):  
The light blinks twice per second.
  - Normal system code indication (with past trouble code):  
When the past trouble code is stored in the center airbag sensor, the light blinks only once per second.
  - Trouble code indication:  
The first blinking indicates the first DTC. The second blinking occurs after a 1.5 second pause.
- If there is more than 1 code, there will be a 2.5 second pause between each code. After all codes are shown, there will be a 4.0 second pause, and then they all will be repeated.
- HINT:
- If 2 or more malfunctions are found, the indication begins with the smaller numbered code.
  - If DTCs are indicated without connecting the terminals, proceed to the "TC and CG Terminal Circuit" procedures (see page [RS-233](#)).

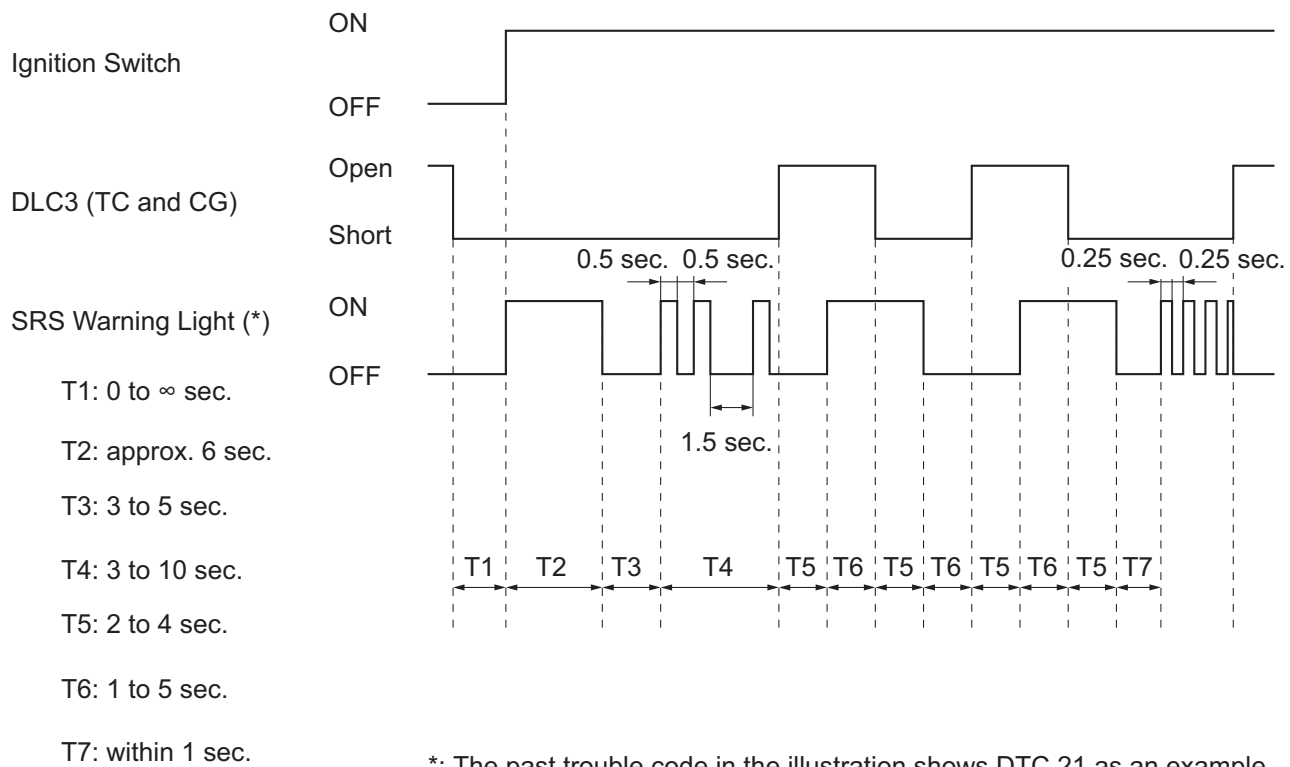
## 2. CLEAR DTC (USING SST (CHECK WIRE))

- (a) Clear the DTCs.
  - (1) When the ignition switch is turned OFF, the DTCs are cleared.

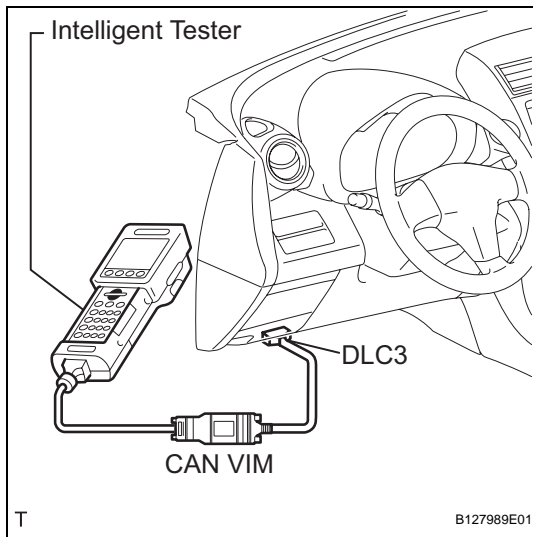
HINT:  
Depending on the DTC, the code may not be cleared by turning off the ignition switch. In this case, proceed to the next procedure.
  - (2) Using SST, connect terminals 13(13(TC)) and 4(CG) of the DLC3, and then turn the ignition switch ON.

**SST 09843-18040**
  - (3) Disconnect terminal 13(TC) of the DLC3 within 3 to 10 seconds after the DTCs are output, and check if the SRS warning light comes on after 3 seconds.
  - (4) Within 2 to 4 seconds after the SRS warning light comes on, connect terminals 13(TC) and 4(CG) of the DLC3.
  - (5) The SRS warning light should go off within 2 to 4 seconds after connecting terminals 13(TC) and 4(CG) of the DLC3. Then, disconnect terminal 13(TC) within 2 to 4 seconds after the SRS warning light goes off.

- (6) The SRS warning light comes on again within 2 to 4 seconds after disconnecting terminal 13(TC). Then, reconnect terminals 13(TC) and 4(CG) within 2 to 4 seconds after the SRS warning light comes on.
- (7) Check if the SRS warning light goes off within 2 to 4 seconds after connecting terminals 13(TC) and 4(CG) of the DLC3. Also check if the normal system code is output within 1 second after the SRS warning light goes off.  
If DTCs are not cleared, repeat this procedure until the codes are cleared.



\*: The past trouble code in the illustration shows DTC 21 as an example.

**3. CHECK DTC (USING INTELLIGENT TESTER)**

- Connect the intelligent tester (with CAN VIM) to the DLC3.
- Turn the ignition switch ON.
- Check the DTCs by following the prompts on the tester screen.

HINT:

Refer to the intelligent tester operator's manual for further details.

**4. CLEAR DTC (USING INTELLIGENT TESTER)**

- Connect the intelligent tester (with CAN VIM) to the DLC3.
- Turn the ignition switch ON.
- Clear the DTCs by following the prompts on the tester screen.

HINT:

Refer to the intelligent tester operator's manual for further details.

**CHECK MODE PROCEDURE****1. CHECK MODE (SIGNAL CHECK)**

- Connect the intelligent tester (with CAN VIM) to the DLC3.
- Turn the ignition switch ON.
- Select the "SIGNAL CHECK", and continue checking with the intelligent tester.

**NOTICE:**

**Select the "SIGNAL CHECK" from the "DTC CHECK" screen displayed on the intelligent tester to clear the output DTCs (both present and past).**

HINT:

- Check mode is more sensitive to malfunctions than normal mode.
- If the normal system code is output in normal mode even when a sensor signal malfunction is suspected, perform the inspection in check mode.

**RS**

## DATA LIST / ACTIVE TEST

### 1. READ DATA LIST

#### HINT:

Using the intelligent tester's Data List allows switch, sensor, actuator and other item values to be read without removing any parts. Reading the Data List early in troubleshooting in one way to save time.

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch ON.
- (c) Read the Data List according to the display on the tester.

#### Center airbag sensor

Item	Measure Item / Range (Display)	Normal Condition	Diagnostic Note
D SEAT POSITION	Seat position (Driver side)/ FORWARD: Seat position forward BKWARD: Seat position backward FAIL: Failure detected	FORWARD/BKWARD	-
PASSENGER CLASS	Front passenger classification/ NG: Data is not determined OFF: Vacant CHILD: Child (Less than 36 kg [79.37 lb]) seated AF05: Adult (36 to 54 kg [79.37 to 119.05 lb]) seated AM50: Adult (More than 54 kg [119.05 lb]) seated FAIL: Failure detected	NG/OFF/CHILD/AF05/AM50/FAIL	-
D BUCKLE SW	Buckle switch (Driver side)/ UNSET: Seat belt not fastened SET: Seat belt fastened NG: Data not determined	UNSET/SET	-
P BUCKLE SW	Buckle switch (Front passenger side)/ UNSET: Seat belt not fastened SET: Seat belt fastened NG: Data not determined	UNSET/SET	-
DISPLAY TYPE	Display type identification information/ LR: Display indicated by LH/RH DP: Display indicated by Driver/ Passenger	DP	-
PAST CODES	Number of past DTCs / Min.: 0, Max.: 255	0	-

## DIAGNOSTIC TROUBLE CODE CHART

If a DTC is displayed during the DTC check, check the circuit listed for the DTC in the table below (refer to the appropriate page).

### HINT:

- When the SRS warning light remains on and the normal system code is output, a decrease in the source voltage is likely to occur. This malfunction is not stored in the memory of the center airbag sensor. If the power source voltage returns to normal, the SRS warning light will automatically go off.
- When 2 or more DTCs are indicated, the DTC with the lowest number appears first.
- If a DTC is not listed on the DTC chart, the center airbag sensor may have malfunctioned.
- In the case of any malfunctions concerning open circuits, shorts to ground, or shorts to B+ due to squibs, other DTCs may not be set. In this case, repair the malfunction currently indicated and then perform a malfunction diagnosis again.
- Mark in the check mode column:  
-: DTC does not correspond to check mode.  
○: DTC corresponds to check mode.
- When DTC B1650/32 is set as a result of troubleshooting the Supplemental Restraint System (SRS), perform troubleshooting for the occupant classification system.

### Airbag System

DTC No.	Detection Item	Check Mode	SRS Warning Light	See Page
B1000/31	Center Airbag Sensor Assembly Malfunction	-	ON	<a href="#">RS-58</a>
B1602/83	Lost Communication with Front Satellite Sensor Bus RH	-	ON	<a href="#">RS-59</a>
B1603/83	Front Satellite Sensor Bus RH Initialization Incomplete	-	ON	<a href="#">RS-59</a>
B1607/84	Lost Communication with Front Satellite Sensor Bus LH	-	ON	<a href="#">RS-70</a>
B1608/84	Front Satellite Sensor Bus LH Initialization Incomplete	-	ON	<a href="#">RS-70</a>
B1610/13	Front Airbag Sensor RH Circuit Malfunction	-	ON	<a href="#">RS-81</a>
B1612/83	Lost Communication with Front Airbag Sensor RH	-	ON	<a href="#">RS-59</a>
B1613/83	Front Airbag Sensor RH Initialization Incomplete	-	ON	<a href="#">RS-59</a>
B1615/14	Front Airbag Sensor LH Circuit Malfunction	-	ON	<a href="#">RS-83</a>
B1617/84	Lost Communication with Front Airbag Sensor LH	-	ON	<a href="#">RS-70</a>
B1618/84	Front Airbag Sensor LH Initialization Incomplete	-	ON	<a href="#">RS-70</a>
B1620/21	Driver Side - Side Airbag Sensor Circuit Malfunction	-	ON	<a href="#">RS-85</a>

DTC No.	Detection Item	Check Mode	SRS Warning Light	See Page
B1622/81	Lost Communication with Driver Side - Side Airbag Sensor Assembly	-	ON	<a href="#">RS-87</a>
B1623/81	Driver Side - Side Airbag Sensor Assembly Initialization Incomplete	-	ON	<a href="#">RS-92</a>
B1625/22	Front Passenger Side - Side Airbag Sensor Circuit Malfunction	-	ON	<a href="#">RS-100</a>
B1627/82	Lost Communication with Front Passenger Side - Side Airbag Sensor Assembly	-	ON	<a href="#">RS-102</a>
B1628/82	Front Passenger Side - Side Airbag Sensor Assembly Initialization Incomplete	-	ON	<a href="#">RS-107</a>
B1630/23	Driver Side Rear Airbag Sensor Circuit Malfunction	-	ON	<a href="#">RS-115</a>
B1632/81	Lost Communication with Driver Side Curtain Shield Airbag Sensor	-	ON	<a href="#">RS-92</a>
B1633/81	Driver Side Curtain Shield Airbag Sensor Initialization Incomplete	-	ON	<a href="#">RS-92</a>
B1635/24	Front Passenger Side Rear Airbag Sensor Circuit Malfunction	-	ON	<a href="#">RS-117</a>
B1637/82	Lost Communication with Front Passenger Side Curtain Shield Airbag Sensor	-	ON	<a href="#">RS-107</a>
B1638/82	Front Passenger Side Curtain Shield Airbag Sensor Initialization Incomplete	-	ON	<a href="#">RS-107</a>
B1642/81	Lost Communication with Driver Side Satellite Sensor Bus	-	ON	<a href="#">RS-92</a>
B1643/81	Driver Side Satellite Sensor Bus Initialization Incomplete	-	ON	<a href="#">RS-119</a>
B1647/82	Lost Communication with Front Passenger Side Satellite Sensor Bus	-	ON	<a href="#">RS-107</a>
B1648/82	Front Passenger Side Satellite Sensor Bus Initialization Incomplete	-	ON	<a href="#">RS-127</a>
B1650/32	Occupant Classification System Malfunction	-	ON	<a href="#">RS-135</a>
B1653/35	Seat Position Airbag Sensor Circuit Malfunction	-	ON	<a href="#">RS-141</a>
B1655/37	Driver Side Seat Belt Buckle Switch Circuit Malfunction	-	ON	<a href="#">RS-153</a>
B1660/43	Passenger Airbag ON / OFF Indicator Circuit Malfunction	-	ON	<a href="#">RS-161</a>
B1800/51	Short in Driver Side Squib Circuit	○	ON	<a href="#">RS-176</a>



DTC No.	Detection Item	Check Mode	SRS Warning Light	See Page
B1801/51	Open in Driver Side Squib Circuit	○	ON	<a href="#">RS-176</a>
B1802/51	Short to GND in Driver Side Squib Circuit	○	ON	<a href="#">RS-176</a>
B1803/51	Short to B+ in Driver Side Squib Circuit	○	ON	<a href="#">RS-176</a>
B1805/52	Short in Front Passenger Side Squib Circuit	○	ON	<a href="#">RS-181</a>
B1806/52	Open in Front Passenger Side Squib Circuit	○	ON	<a href="#">RS-181</a>
B1807/52	Short to GND in Front Passenger Side Squib Circuit	○	ON	<a href="#">RS-181</a>
B1808/52	Short to B+ in Front Passenger Side Squib Circuit	○	ON	<a href="#">RS-181</a>
B1810/53	Short in Driver Side Squib 2nd Step Circuit	○	ON	<a href="#">RS-186</a>
B1811/53	Open in Driver Side Squib 2nd Step Circuit	○	ON	<a href="#">RS-186</a>
B1812/53	Short to GND in Driver Side Squib 2nd Step Circuit	○	ON	<a href="#">RS-186</a>
B1813/53	Short to B+ in Driver Side Squib 2nd Step Circuit	○	ON	<a href="#">RS-186</a>
B1815/54	Short in Front Passenger Side Squib 2nd Step Circuit	○	ON	<a href="#">RS-191</a>
B1816/54	Open in Front Passenger Side Squib 2nd Step Circuit	○	ON	<a href="#">RS-191</a>
B1817/54	Short to GND in Front Passenger Side Squib 2nd Step Circuit	○	ON	<a href="#">RS-191</a>
B1818/54	Short to B+ in Front Passenger Side Squib 2nd Step Circuit	○	ON	<a href="#">RS-191</a>
B1820/55	Short in Driver Side - Side Squib Circuit	○	ON	<a href="#">RS-196</a>
B1821/55	Open in Driver Side - Side Squib Circuit	○	ON	<a href="#">RS-196</a>
B1822/55	Short to GND in Driver Side - Side Squib Circuit	○	ON	<a href="#">RS-196</a>
B1823/55	Short to B+ in Driver Side - Side Squib Circuit	○	ON	<a href="#">RS-196</a>
B1825/56	Short in Front Passenger Side - Side Squib Circuit	○	ON	<a href="#">RS-201</a>
B1826/56	Open in Front Passenger Side - Side Squib Circuit	○	ON	<a href="#">RS-201</a>
B1827/56	Short to GND in Front Passenger Side - Side Squib Circuit	○	ON	<a href="#">RS-201</a>
B1828/56	Short to B+ in Front Passenger Side - Side Squib Circuit	○	ON	<a href="#">RS-201</a>
B1830/57	Short in Driver Side Curtain Shield Squib Circuit	○	ON	<a href="#">RS-206</a>

DTC No.	Detection Item	Check Mode	SRS Warning Light	See Page
B1831/57	Open in Driver Side Curtain Shield Squib Circuit	○	ON	<a href="#">RS-206</a>
B1832/57	Short to GND in Driver Side Curtain Shield Squib Circuit	○	ON	<a href="#">RS-206</a>
B1833/57	Short to B+ in Driver Side Curtain Shield Squib Circuit	○	ON	<a href="#">RS-206</a>
B1835/58	Short in Front Passenger Side Curtain Shield Squib Circuit	○	ON	<a href="#">RS-210</a>
B1836/58	Open in Front Passenger Side Curtain Shield Squib Circuit	○	ON	<a href="#">RS-210</a>
B1837/58	Short to GND in Front Passenger Side Curtain Shield Squib Circuit	○	ON	<a href="#">RS-210</a>
B1838/58	Short to B+ in Front Passenger Side Curtain Shield Squib Circuit	○	ON	<a href="#">RS-210</a>
B1900/73	Short in Driver Side Front Pretensioner Squib Circuit	○	ON	<a href="#">RS-215</a>
B1901/73	Open in Driver Side Front Pretensioner Squib Circuit	○	ON	<a href="#">RS-215</a>
B1902/73	Short to GND in Driver Side Front Pretensioner Squib Circuit	○	ON	<a href="#">RS-215</a>
B1903/73	Short to B+ in Driver Side Front Pretensioner Squib Circuit	○	ON	<a href="#">RS-215</a>
B1905/74	Short in Front Passenger Side Front Pretensioner Squib Circuit	○	ON	<a href="#">RS-219</a>
B1906/74	Open in Front Passenger Side Front Pretensioner Squib Circuit	○	ON	<a href="#">RS-219</a>
B1907/74	Short to GND in Front Passenger Side Front Pretensioner Squib Circuit	○	ON	<a href="#">RS-219</a>
B1908/74	Short to B+ in Front Passenger Side Front Pretensioner Squib Circuit	○	ON	<a href="#">RS-219</a>

**DTC****B1000/31****Center Airbag Sensor Assembly Malfunction****DESCRIPTION**

The center airbag sensor consists of the airbag sensor, the safing sensor, the drive circuit, the diagnosis circuit and the ignition control.

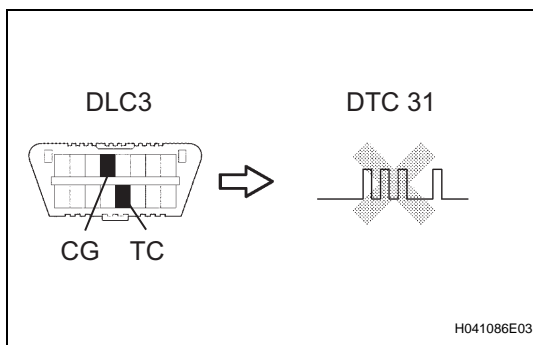
If the center airbag sensor receives signals from the airbag sensor, it determines whether or not the SRS should be activated.

DTC B1000/31 is recorded when a malfunction is detected in the center airbag sensor.

DTC No.	DTC Detection Condition	Trouble Area
B1000/31	Center airbag sensor malfunction	Center airbag sensor assembly

**HINT:**

When a malfunction code is displayed simultaneously with DTC B1000/31, repair the malfunction indicated by this code (except DTC B1000/31) first.

**INSPECTION PROCEDURE****1****CHECK CENTER AIRBAG SENSOR ASSEMBLY**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**OK:****DTC B1000/31 is not output.****NG****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****OK****RS****USE SIMULATION METHOD TO CHECK**

<b>DTC</b>	<b>B1602/83</b>	<b>Lost Communication with Front Satellite Sensor Bus RH</b>
<b>DTC</b>	<b>B1603/83</b>	<b>Front Satellite Sensor Bus RH Initialization Incomplete</b>
<b>DTC</b>	<b>B1612/83</b>	<b>Lost Communication with Front Airbag Sensor RH</b>
<b>DTC</b>	<b>B1613/83</b>	<b>Front Airbag Sensor RH Initialization Incomplete</b>

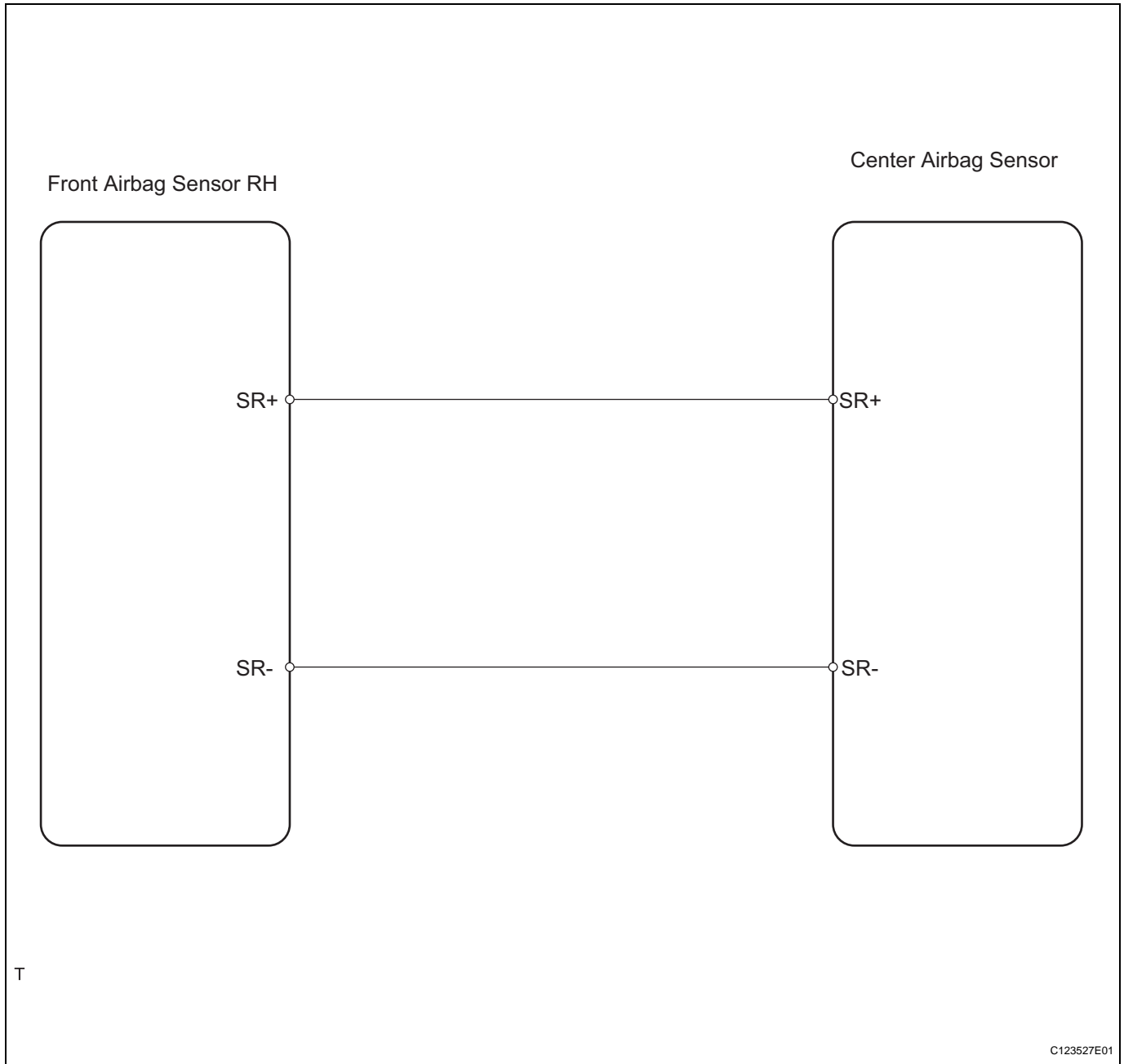
## DESCRIPTION

The front airbag sensor RH consists of the diagnostic circuit and the frontal deceleration sensor.

If the center airbag sensor receives signals from the frontal deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1602/83, B1603/83, B1612/83 or B1613/83 is recorded when a malfunction is detected in the front airbag sensor RH circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1602/83 B1603/83 B1612/83 B1613/83	When one of following conditions is met: <ul style="list-style-type: none"> <li>Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in the front airbag sensor RH circuit for 2 seconds.</li> <li>Front airbag sensor RH malfunction</li> <li>Center airbag sensor malfunction</li> </ul>	<ul style="list-style-type: none"> <li>Instrument panel wire</li> <li>Engine room main wire</li> <li>Front airbag sensor RH</li> <li>Center airbag sensor</li> </ul>

**WIRING DIAGRAM****RS****INSPECTION PROCEDURE****1 CHECK CONNECTION OF CONNECTOR**

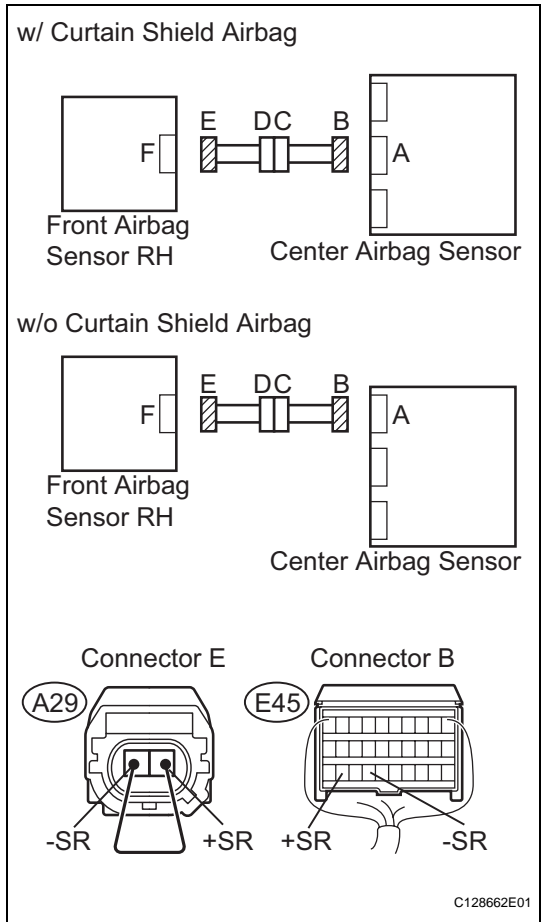
- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the center airbag sensor and the front airbag sensor RH.

**OK:****The connectors are connected.****NG****CONNECT CONNECTOR**

OK

2

CHECK FRONT AIRBAG SENSOR RH CIRCUIT (OPEN)



- (a) Disconnect the connectors from the center airbag sensor and the front airbag sensor RH.
- (b) Using a service wire, connect A29-2 (+SR) and A29-1 (-SR) of connector E.
- NOTICE:**  
**Do not forcibly insert a service wire into the terminals of the connector when connecting.**
- (c) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
E45-29 (+SR) - E45-27 (-SR)	Below 1 Ω

NG

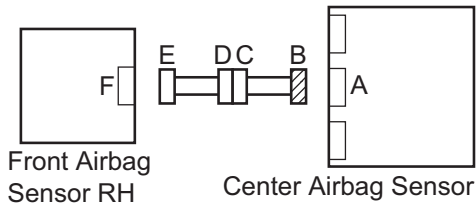
Go to step 7

RS

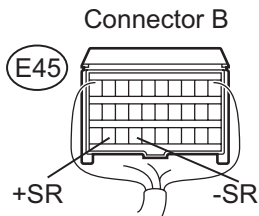
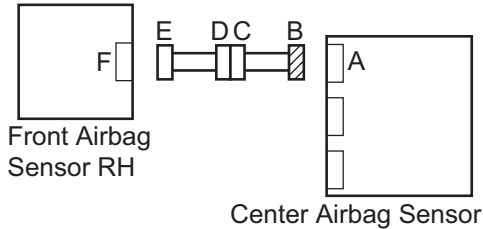
OK

3 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (SHORT)

w/ Curtain Shield Airbag



w/ Curtain Shield Airbag



C128663E01

- (a) Disconnect the service wire from connector E.
- (b) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
E45-29 (+SR) - E45-27 (-SR)	1 MΩ or higher

NG

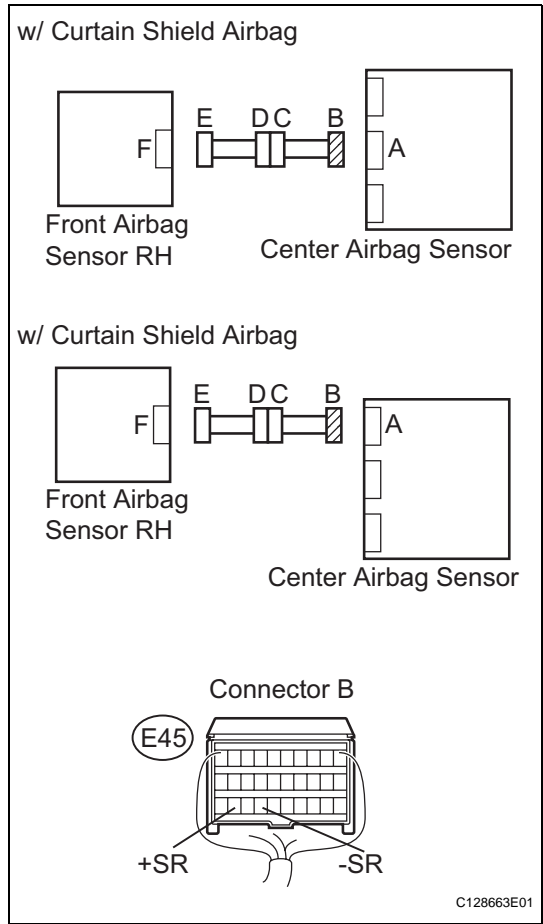
Go to step 8

OK

RS

4

CHECK FRONT AIRBAG SENSOR RH CIRCUIT (TO B+)



- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
E45-29 (+SR) -Body ground	Below 1 V
E45-27 (-SR) - Body ground	Below 1 V

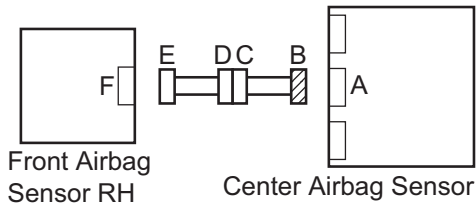
NG

Go to step 9

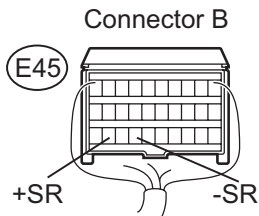
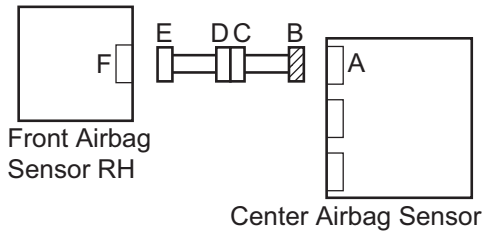


5 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (TO GROUND)

w/ Curtain Shield Airbag



w/ Curtain Shield Airbag



C128663E01

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
E45-29 (+SR) - Body ground	1 MΩ or higher
E45-27 (-SR) - Body ground	1 MΩ or higher

NG

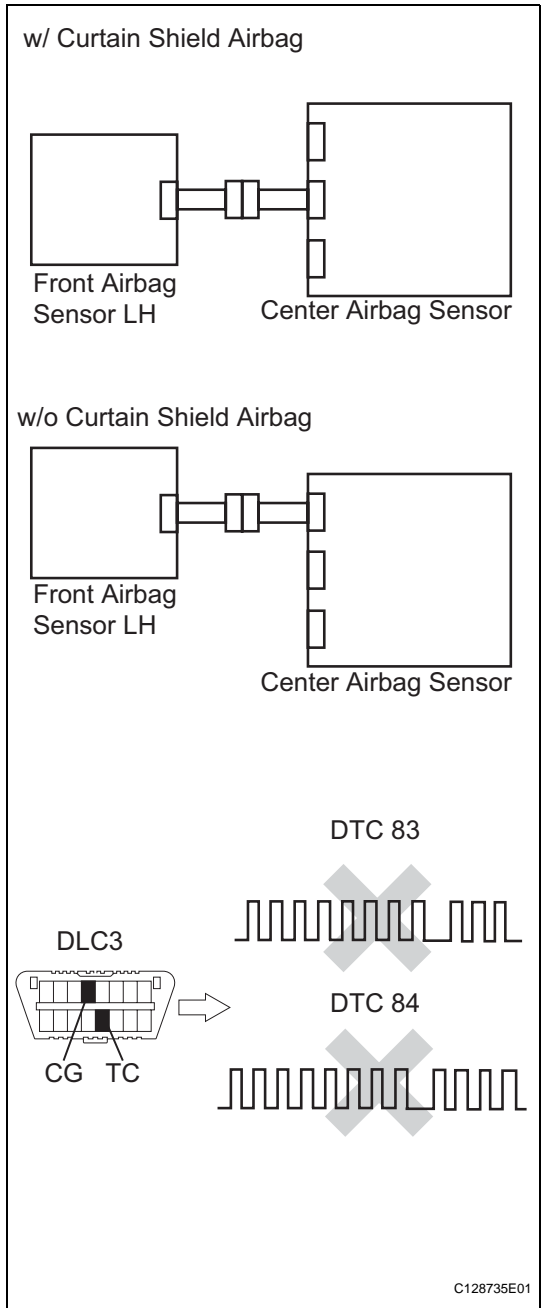
Go to step 10

OK

RS

6

CHECK FRONT AIRBAG SENSOR RH



- (a) Connect the connectors to the center airbag sensor .
- (b) Interchange the front airbag sensor RH and LH, and connect the connectors to them.
- (c) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (d) Turn the ignition switch ON, and wait for at least 60 seconds.
- (e) Clear the DTCs (see page RS-49).
- (f) Turn the ignition switch OFF.
- (g) Turn the ignition switch ON, and wait for at least 60 seconds.
- (h) Check the DTCs (see page RS-49).

Result

Result	Proceed to
DTC B1602/83, B1603/83, B1612/83, B1613/83, B1607/84, B1608/84, B1617/84 and B1618/84 are not output.	A
DTC B1602/83, B1603/83, B1612/83 and B1613/83 are output	B
B1607/84, B1608/84, B1617/84 and B1618/84 are output	C

HINT:  
DTCs other than DTC B1602/83, B1603/83, B1612/83, B1613/83, B1607/84, B1608/84, B1617/84 and B1618/84 may be output at this time, but they are not related to this check.

B

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

C

REPLACE FRONT AIRBAG SENSOR RH

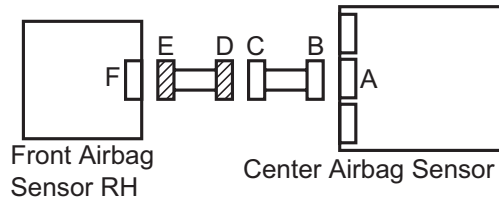
A

USE SIMULATION METHOD TO CHECK

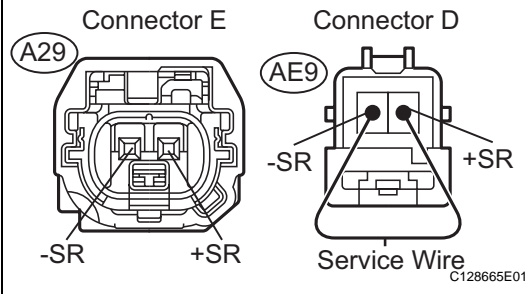
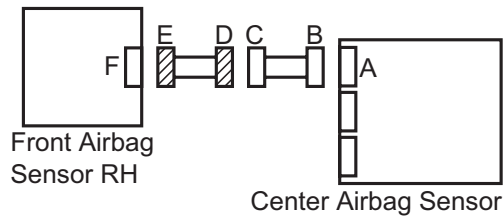
## 7

## CHECK ENGINE ROOM MAIN WIRE (OPEN)

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



- Disconnect the service wire from connector E.
- Disconnect the engine room main wire connector from the instrument panel wire.
- Using a service wire, connect AE9-2 (+SR) and AE9-1 (-SR) of connector D.

**NOTICE:**

**Do not forcibly insert a service wire into the terminals of the connector when connecting.**

- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
A29-2 (+SR) - A29-1 (-SR)	Below 1 $\Omega$

**NG**

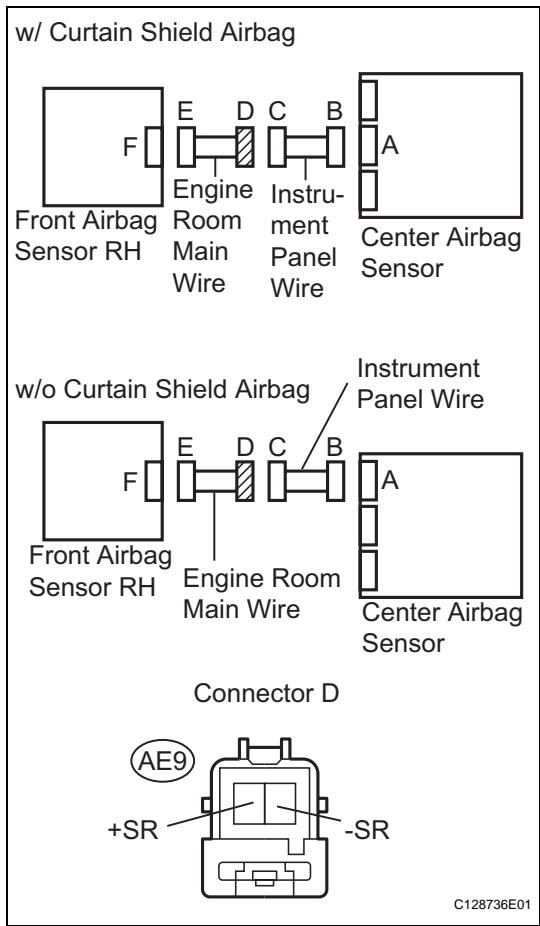
**REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

**OK****RS**

**REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

8

CHECK ENGINE ROOM MAIN WIRE (SHORT)



- (a) Disconnect the engine room main wire connector from the instrument panel wire.
- (b) Disconnect the service wire from connector E.
- (c) Measure the resistance of the wire harness side connector.

Standard resistance

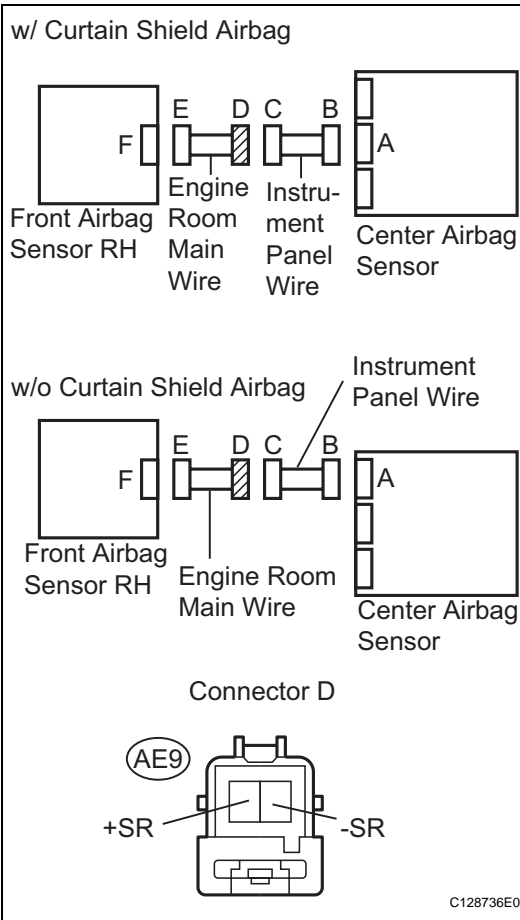
Tester Connection	Specified Condition
AE9-1 (+SR) - AE9-2 (-SR)	1 MΩ or higher

NG

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

**9 CHECK ENGINE ROOM MAIN WIRE (TO B+)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Disconnect the engine room main wire connector from the instrument panel wire.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

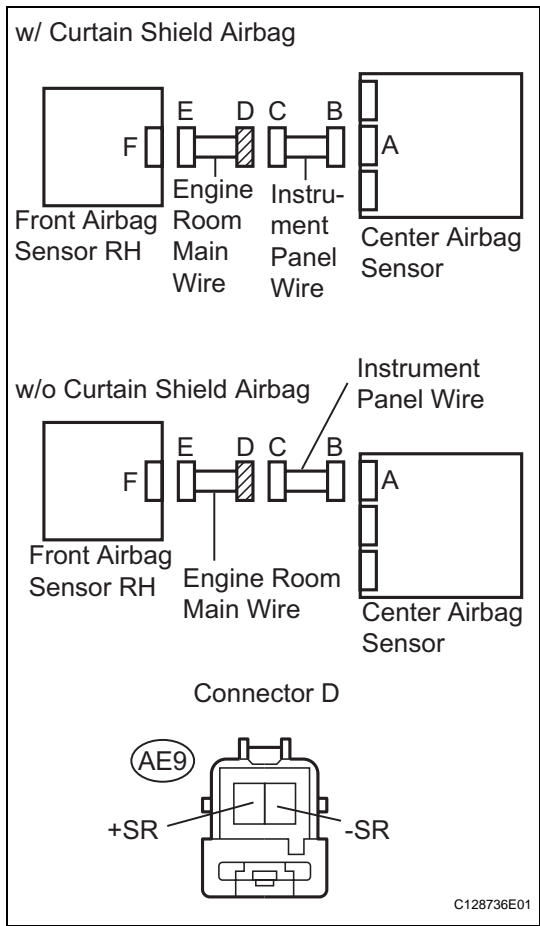
**Standard voltage**

Tester Connection	Specified Condition
AE9-1 (+SR) - Body ground	Below 1 V
AE9-2 (-SR) - Body ground	Below 1 V

**NG****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****OK****RS****REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

10

CHECK ENGINE ROOM MAIN WIRE (TO GROUND)



- (a) Disconnect the engine room main wire connector from the instrument panel wire.
- (b) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
AE9-1 (+SR) - Body ground	1 MΩ or higher
AE9-2 (-SR) - Body ground	1 MΩ or higher

NG

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

<b>DTC</b>	<b>B1607/84</b>	<b>Lost Communication with Front Satellite Sensor Bus LH</b>
<b>DTC</b>	<b>B1608/84</b>	<b>Front Satellite Sensor Bus LH Initialization Incomplete</b>
<b>DTC</b>	<b>B1617/84</b>	<b>Lost Communication with Front Airbag Sensor LH</b>
<b>DTC</b>	<b>B1618/84</b>	<b>Front Airbag Sensor LH Initialization Incomplete</b>

## DESCRIPTION

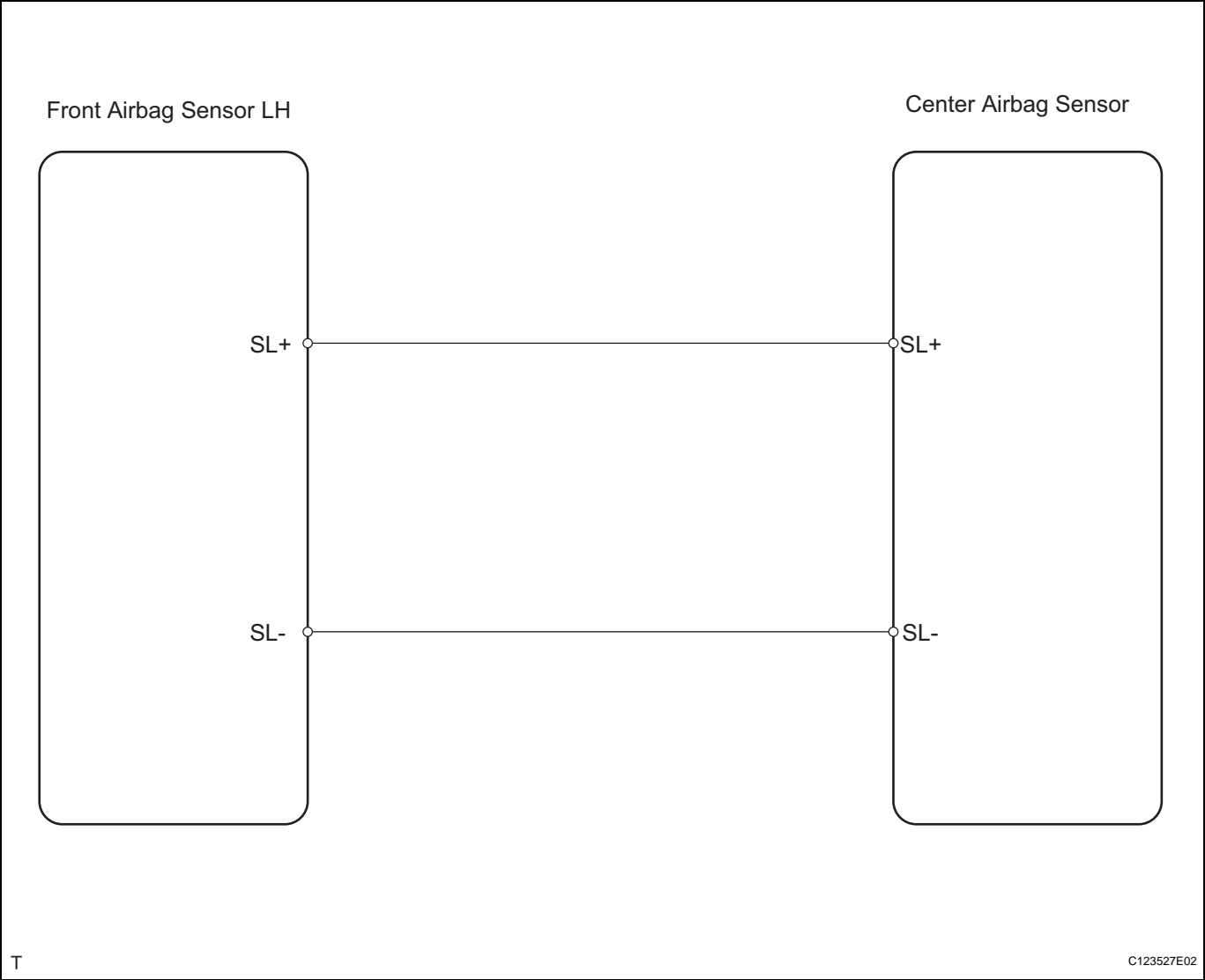
The front airbag sensor LH consists of the diagnostic circuit and the frontal deceleration sensor.

If the center airbag sensor receives signals from the frontal deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1607/84, B1608/84, B1617/84 or B1618/84 is recorded when a malfunction is detected in the front airbag sensor LH circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1607/84 B1608/84 B1617/84 B1618/84	When one of following conditions is met: <ul style="list-style-type: none"> <li>Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in the front airbag sensor LH circuit for 2 seconds.</li> <li>Front airbag sensor LH malfunction</li> <li>Center airbag sensor malfunction</li> </ul>	<ul style="list-style-type: none"> <li>Instrument panel wire</li> <li>Engine room main wire</li> <li>Front airbag sensor LH</li> <li>Center airbag sensor</li> </ul>

WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK CONNECTION OF CONNECTOR
---	-------------------------------

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) terminal, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the center airbag sensor and the front airbag sensor LH.

OK:

The connectors are properly connected.

NG

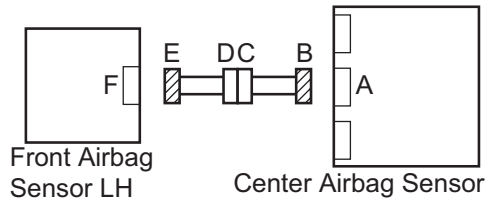
CONNECT CONNECTOR

OK

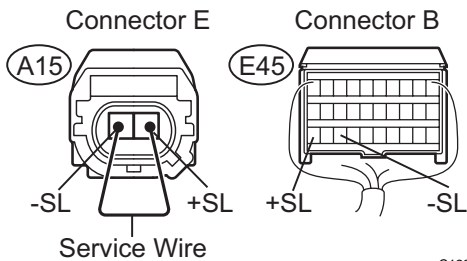
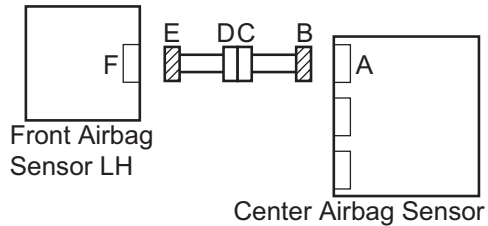


**2****CHECK FRONT AIRBAG SENSOR LH CIRCUIT (OPEN)**

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



C128662E02

(a) Disconnect the connectors from the center airbag sensor and the front airbag sensor LH.

(b) Using a service wire, connect A15-2 (+SL) and A15-1 (-SL) of connector E.

**NOTICE:**

**Do not forcibly insert a service wire into the terminals of the connector when connecting.**

(c) Measure the resistance of the wire harness side connector.

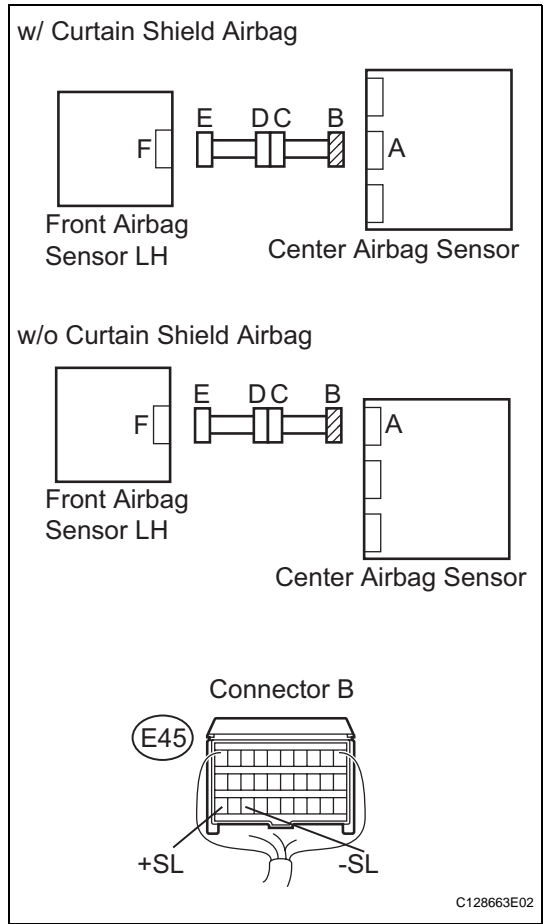
**Standard resistance**

Tester Connection	Specified Condition
E45-30 (+SL) - E45-28 (-SL)	Below 1 $\Omega$

**NG****Go to step 7****OK****RS**

3

CHECK FRONT AIRBAG SENSOR LH CIRCUIT (SHORT)



- (a) Disconnect the service wire from connector E.
- (b) Measure the resistance of the wire harness side connector.

**Standard resistance**

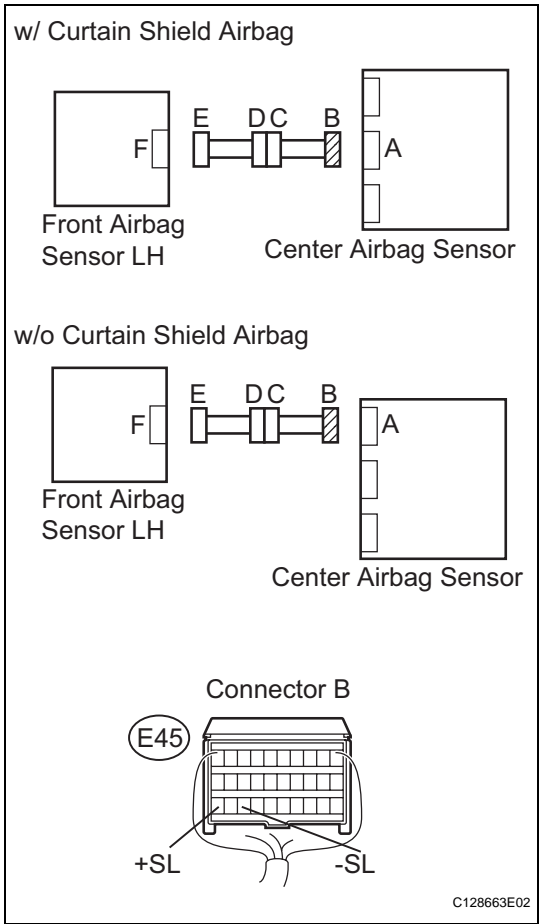
Tester Connection	Specified Condition
E45-30 (+SL) - E45-28 (-SL)	1 MΩ or higher

NG

Go to step 8

OK

4 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (TO B+)



- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage of the wire harness side connectors.

Standard voltage

Tester Connection	Specified Condition
E45-30 (+SL) - Body ground	Below 1 V
E45-28 (-SL) - Body ground	Below 1 V

NG

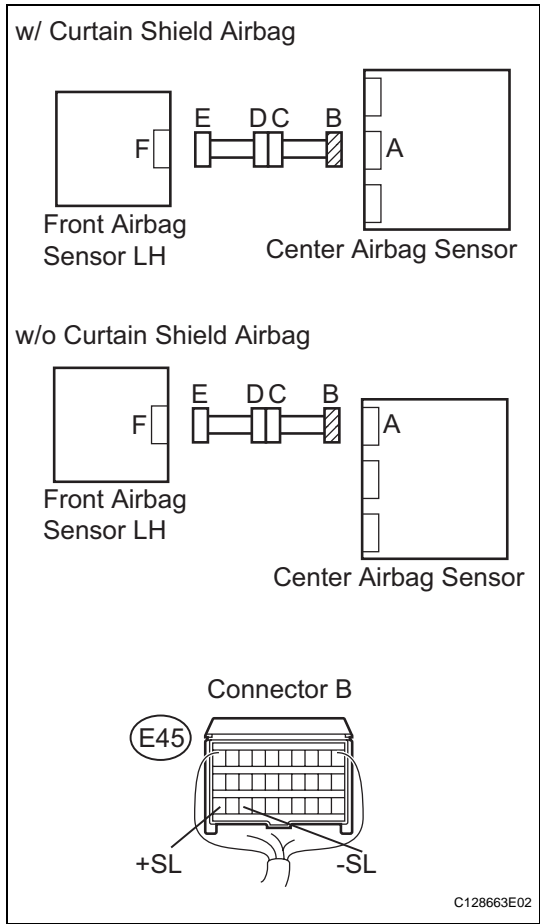
Go to step 9

OK

RS

5

CHECK FRONT AIRBAG SENSOR LH CIRCUIT (TO GROUND)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
E45-30 (+SL) - Body ground	1 MΩ or higher
E45-28 (-SL) - Body ground	1 MΩ or higher

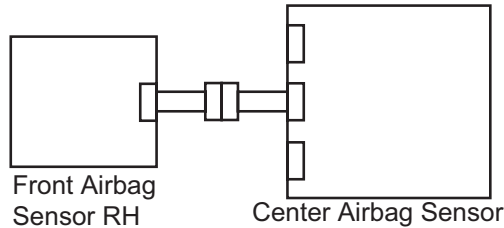
NG

Go to step 10

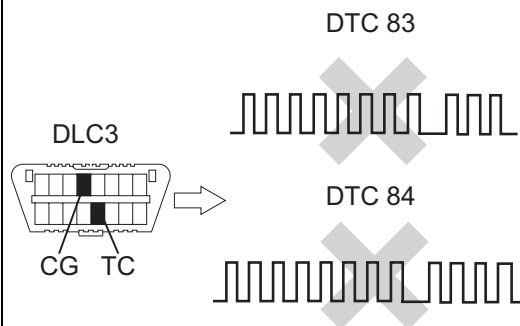
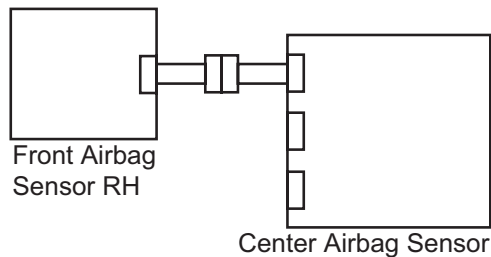
OK

**6 CHECK FRONT AIRBAG SENSOR LH**

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



C128735E02

- Connect the connectors to the center airbag sensor.
- Interchange the front airbag sensor RH and LH, and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**Result**

Result	Proceed to
DTC B1602/83, B1603/83, B1612/83, B1613/83, B1607/84, B1608/84, B1617/84 and B1618/84 are not output.	A
DTC B1607/84, B1608/84, B1617/84 and B1618/84 are output	B
DTC B1602/83, B1603/83, B1612/83 and B1613/83 are output	C

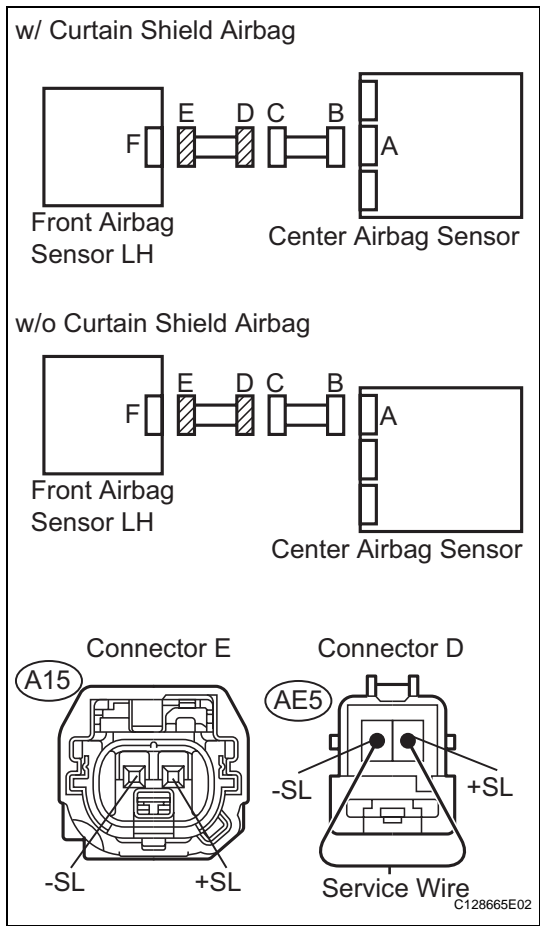
**HINT:**

DTCs other than B1602/83, B1603/83, B1612/83, B1613/83, B1607/84, B1608/84, B1617/84 and B1618/84 may be output at this time, but they are not related to this check.

**B****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****C****REPLACE FRONT AIRBAG SENSOR LH****RS****A****USE SIMULATION METHOD TO CHECK**

7

CHECK ENGINE ROOM MAIN WIRE (OPEN)



- (a) Disconnect the service wire from connector E.
- (b) Disconnect the engine room main wire connector from the instrument panel wire.
- (c) Using a service wire, connect AE5-1 (+SL) and AE5-2 (-SL) of connector D.

**NOTICE:**  
**Do not forcibly insert a service wire into the terminals of the connector when connecting.**

- (d) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
A15-2 (+SL) - A15-1 (-SL)	Below 1 Ω

NG

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

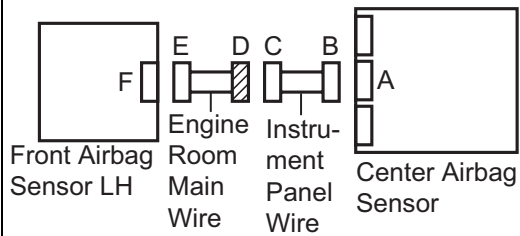
RS

OK

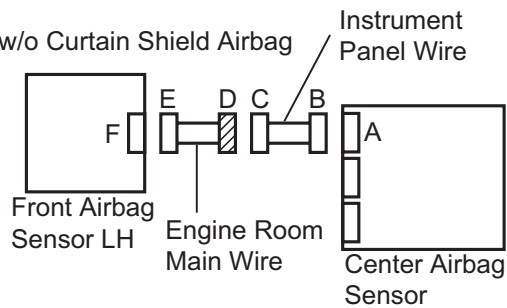
REPAIR OR REPLACE INSTRUMENT PANEL WIRE

**8 CHECK ENGINE ROOM MAIN WIRE (SHORT)**

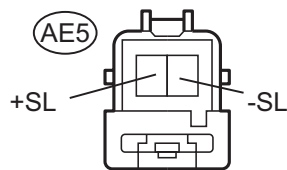
w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



Connector D



C128736E02

- (a) Disconnect the engine room main wire connector from the instrument panel wire.
- (b) Measure the resistance of the wire harness side connector.

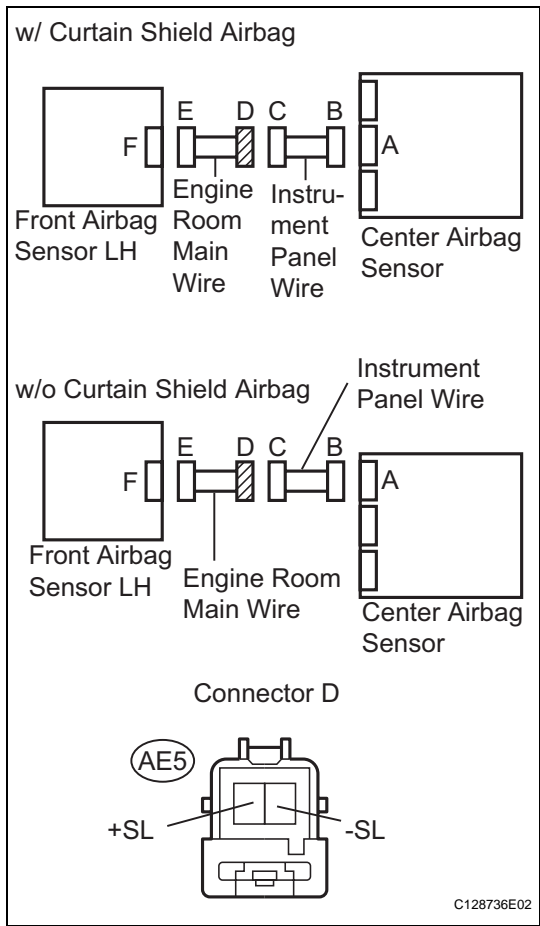
**Standard resistance**

Tester Connection	Specified Condition
AE5-1 (+SL) - AE5-2 (-SL)	1 MΩ or higher

**NG****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****OK****RS****REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

9

CHECK ENGINE ROOM MAIN WIRE (TO B+)



- (a) Turn the ignition switch OFF.
  - (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
  - (c) Disconnect the engine room main wire connector from the instrument panel wire.
  - (d) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
  - (e) Turn the ignition switch ON.
  - (f) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
AE5-1 (+SL) - Body ground	Below 1 V
AE5-2 (-SL) - Body ground	Below 1 V

NG

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

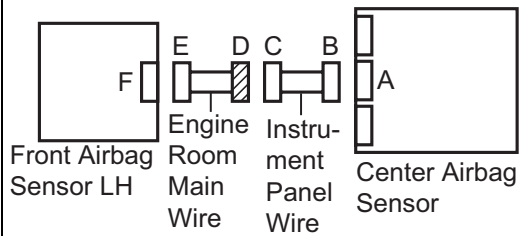
OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

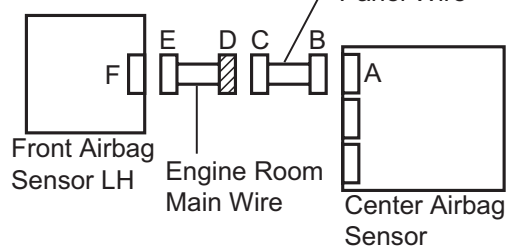


**10 CHECK ENGINE ROOM MAIN WIRE (TO GROUND)**

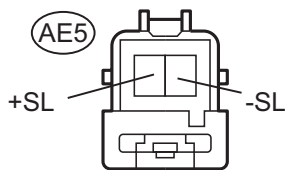
w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



Connector D



C128736E02

- (a) Disconnect the engine room main wire connector from the instrument panel wire.
- (b) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
AE5-1 (+SL) - Body ground	1 M $\Omega$ or higher
AE5-2 (-SL) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****OK****RS****REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

DTC

B1610/13

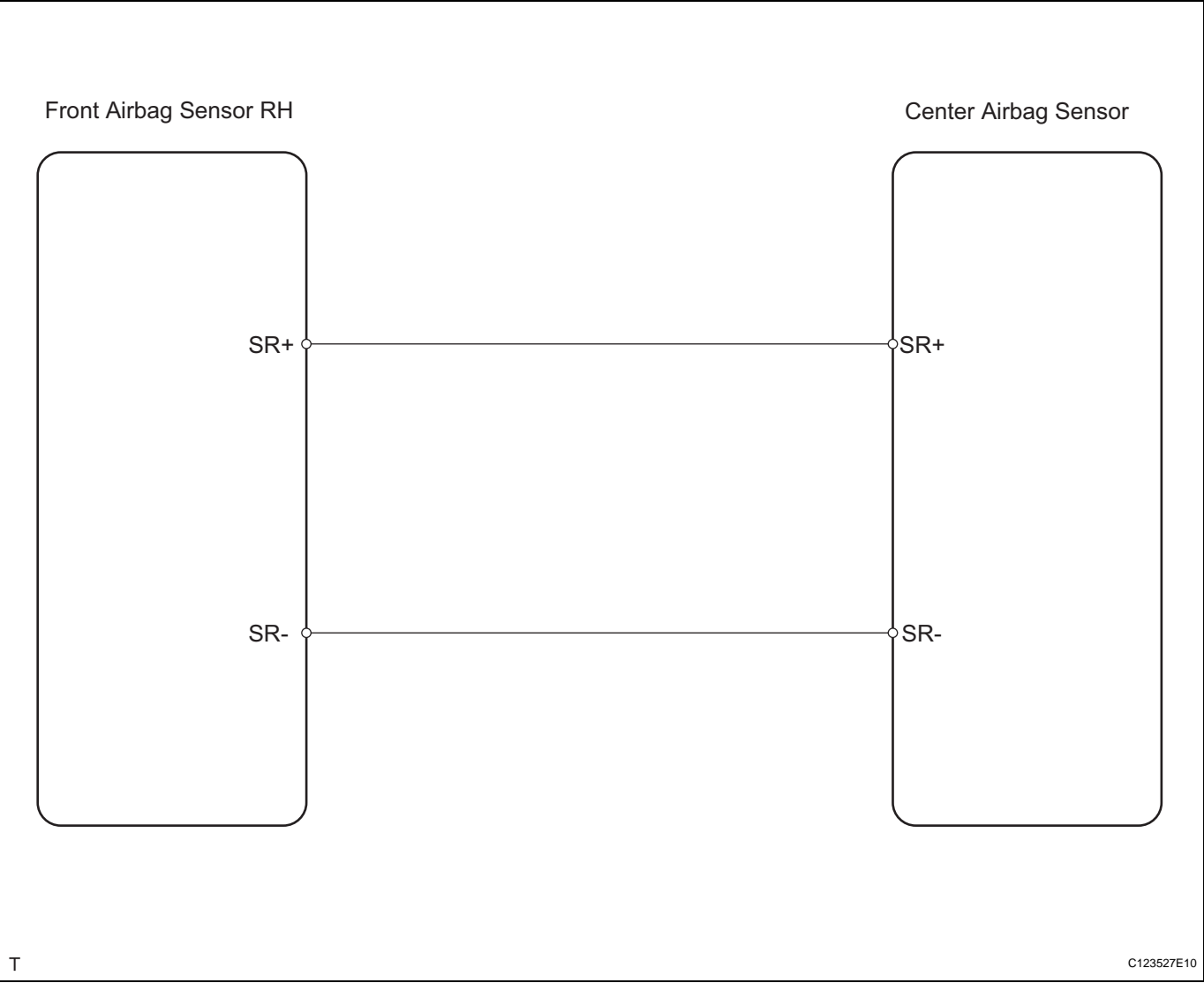
Front Airbag Sensor RH Circuit Malfunction

DESCRIPTION

The front airbag sensor RH consists of the diagnostic circuit, the frontal deceleration sensor, etc. If the center airbag sensor assembly receives signals from the frontal deceleration sensor, it determines whether or not the SRS should be activated. DTC B1610/13 is recorded when a malfunction is detected in the front airbag sensor RH circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1610/13	When one of following conditions is met: <ul style="list-style-type: none"><li>Front airbag sensor RH malfunction</li><li>Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>Engine room main wire</li><li>Front airbag sensor RH</li><li>Center airbag sensor</li></ul>

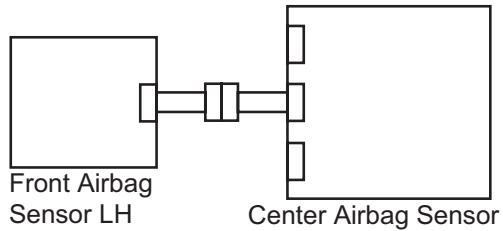
WIRING DIAGRAM



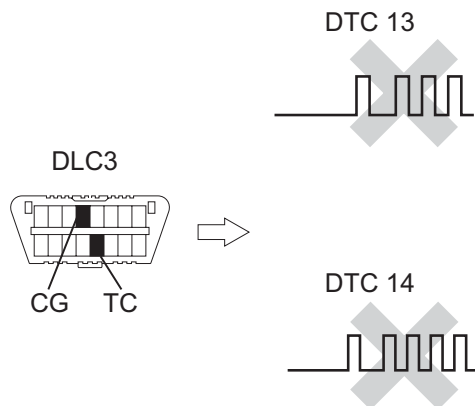
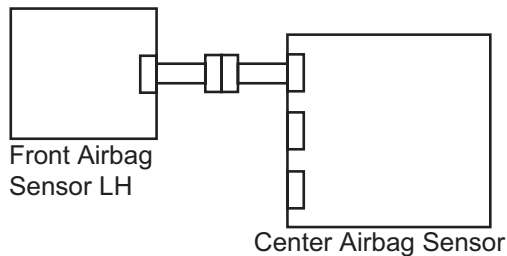
## INSPECTION PROCEDURE

**1 CHECK FRONT AIRBAG SENSOR RH**

w/ Curtain Shield Airbag



w/ Curtain Shield Airbag



C128664E04

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Interchange the front airbag sensor RH and LH, and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**Result**

Result	Proceed to
DTC B1610/13 and B1615/14 are not output.	A
DTC B1610/13 is output.	B
DTC B1615/14 is output.	C

**HINT:**

DTCs other than DTC B1610/13 and B1615/14 may be output at this time, but they are not related to this check.

**B****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****C****REPLACE FRONT AIRBAG SENSOR RH****RS****A****USE SIMULATION METHOD TO CHECK**

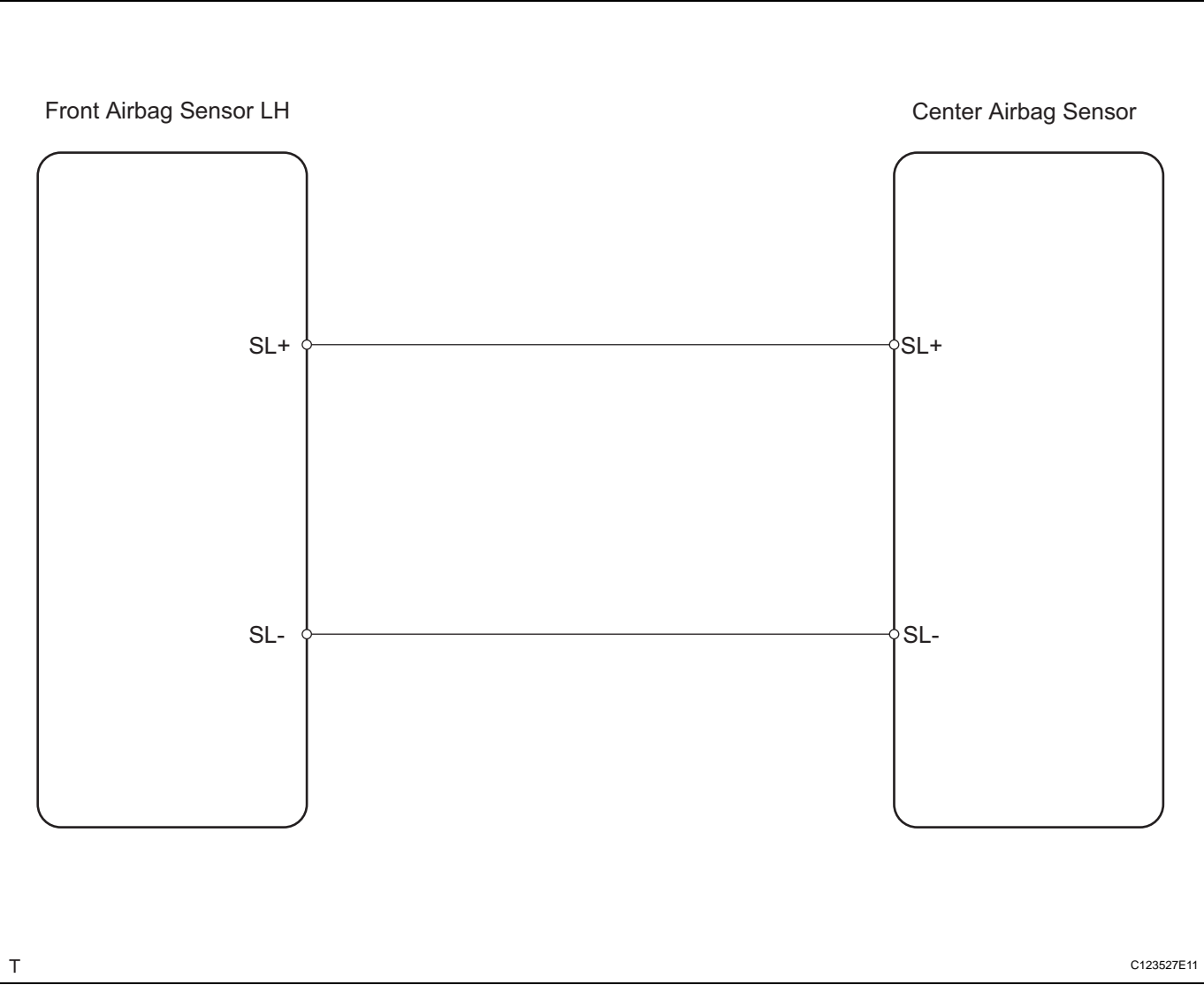
DTC	B1615/14	Front Airbag Sensor LH Circuit Malfunction
-----	----------	--

DESCRIPTION

The front airbag sensor LH consists of the diagnostic circuit, the frontal deceleration sensor, etc.  
If the center airbag sensor receives signals from the frontal deceleration sensor, it determines whether or not the SRS should be activated.  
DTC B1615/14 is recorded when a malfunction is detected in the front airbag sensor LH circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1615/14	When one of following conditions is met: <ul style="list-style-type: none"><li>• Front airbag sensor LH malfunction</li><li>• Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>• Engine room main wire</li><li>• Front airbag sensor LH</li><li>• Center airbag sensor</li></ul>

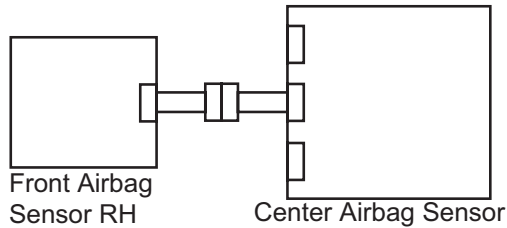
WIRING DIAGRAM



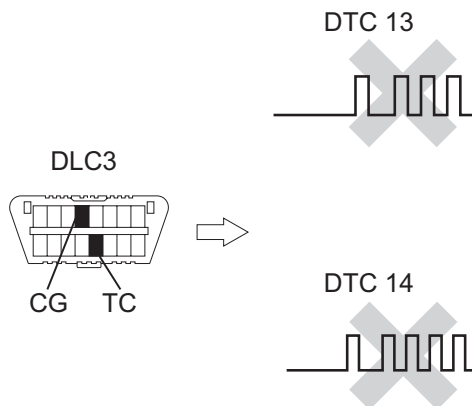
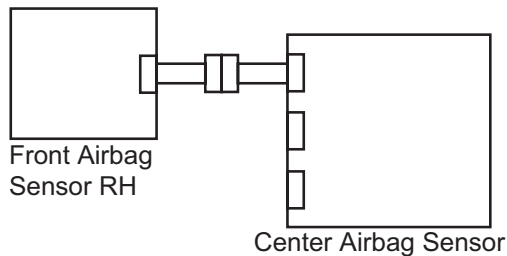
## INSPECTION PROCEDURE

**1 CHECK FRONT AIRBAG SENSOR LH**

w/ Curtain Shield Airbag



w/ Curtain Shield Airbag



C128664E05

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Interchange the front airbag sensor RH and LH, and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**Result**

Result	Proceed to
DTC B1610/13 and B1615/14 are not output.	A
DTC B1610/13 is output.	B
DTC B1615/14 is output.	C

**HINT:**

DTCs other than DTC B1610/13 and B1615/14 may be output at this time, but they are not related to this check.

**B****REPLACE FRONT AIRBAG SENSOR LH****C****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****RS****A****USE SIMULATION METHOD TO CHECK**

DTC	B1620/21	Driver Side - Side Airbag Sensor Circuit Malfunction
-----	----------	--

**DESCRIPTION**

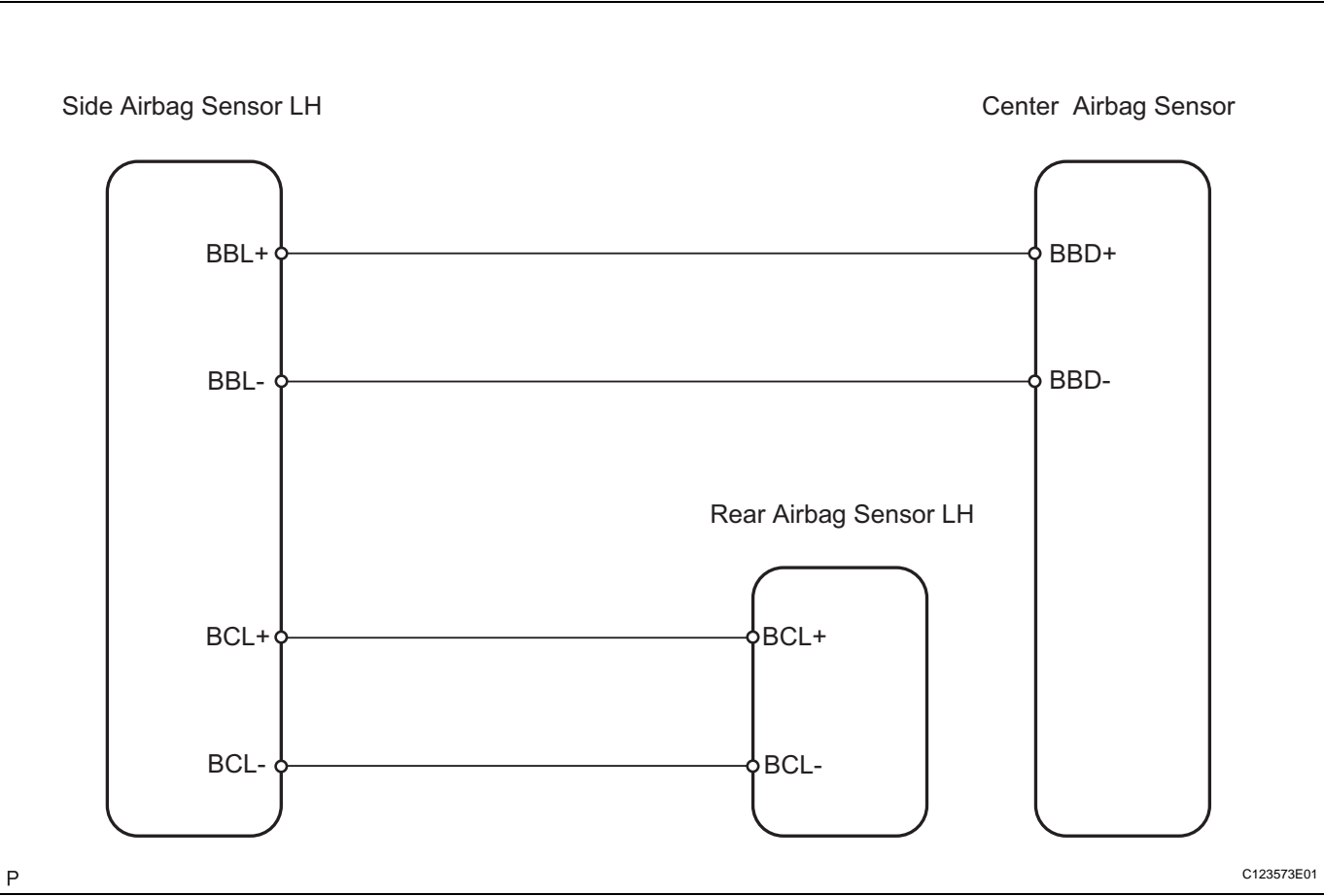
The side airbag sensor LH consists of part including the diagnostic circuit and the lateral deceleration sensor.

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

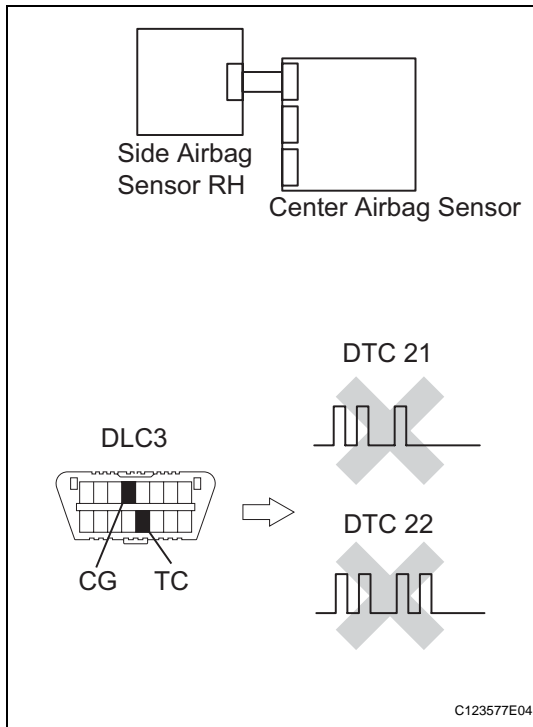
DTC B1620/21 is set when a malfunction is detected in the side airbag sensor LH circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1620/21	When one of following conditions is met: <ul style="list-style-type: none"><li>Side airbag sensor LH malfunction</li><li>Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>Side airbag sensor LH</li><li>Center airbag sensor</li></ul>

WIRING DIAGRAM



## INSPECTION PROCEDURE

**1 CHECK SIDE AIRBAG SENSOR LH**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Interchange the side airbag sensor RH and the side airbag sensor LH, and connect the connectors to them.
- (d) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (e) Turn the ignition switch ON, and wait for at least 60 seconds.
- (f) Clear the DTCs (see page RS-49).
- (g) Turn the ignition switch OFF.
- (h) Turn the ignition switch ON, and wait for at least 60 seconds.
- (i) Check the DTCs (see page RS-49).

**Result**

Result	Proceed to
DTC B1620/21 and B1625/22 are not output.	A
DTC B1620/21 is output.	B
DTC B1625/22 is output.	C

DTCs other than DTC B1620/21 and B1625/22 may be output at this time, but they are not related to this check.

**B**

**REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

**C**

**REPLACE SIDE AIRBAG SENSOR LH**

**A****RS**

**USE SIMULATION METHOD TO CHECK**

DTC	B1622/81	Lost Communication with Driver Side - Side Airbag Sensor Assembly
-----	----------	---

**DESCRIPTION**

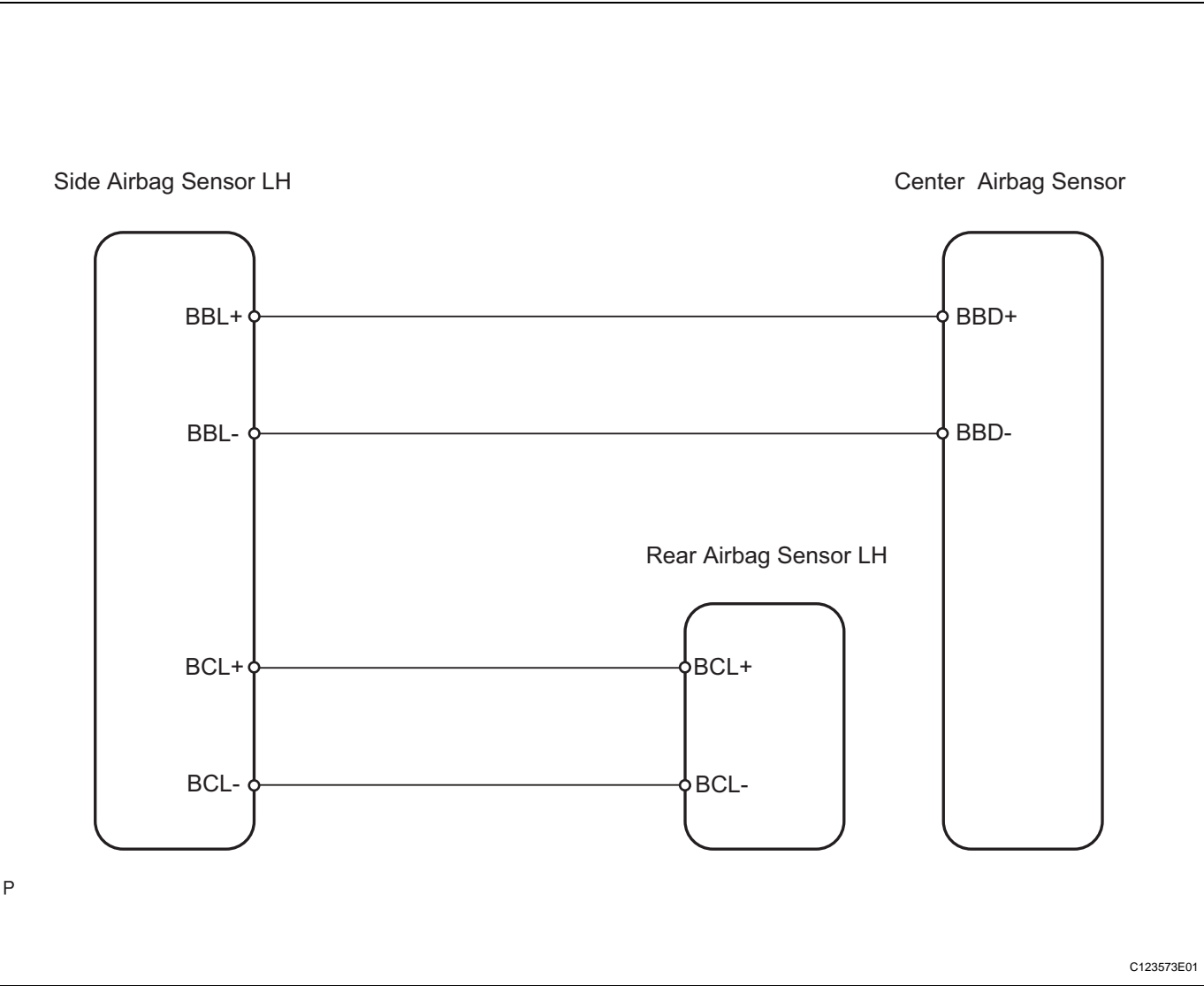
The side airbag sensor LH consists of part including the diagnostic circuit and the lateral deceleration sensor.

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1622/81 is set when a malfunction is detected in the side airbag sensor LH circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1622/81	When one of following conditions is met: <ul style="list-style-type: none"><li>Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in side airbag sensor LH circuit for 2 seconds.</li><li>Side airbag sensor LH malfunction</li><li>Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>Floor wire</li><li>Side airbag sensor LH</li><li>Center airbag sensor</li></ul>

WIRING DIAGRAM





## INSPECTION PROCEDURE

## 1 CHECK CONNECTION OF CONNECTOR

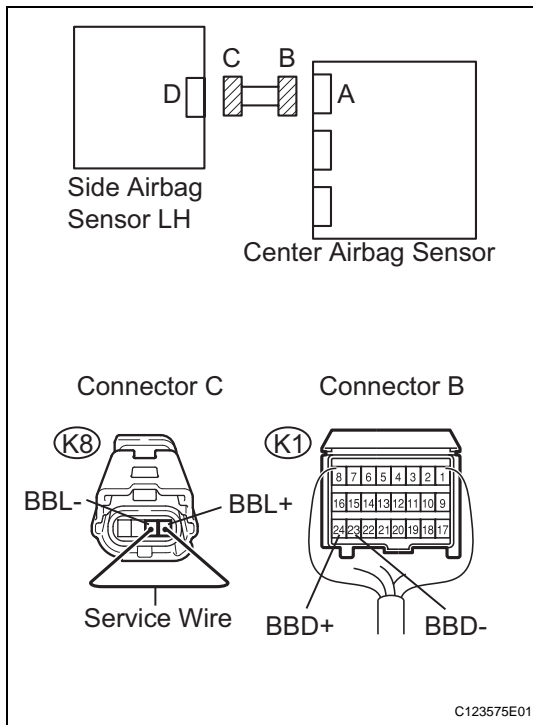
- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the center airbag sensor, rear airbag sensor LH and the side airbag sensor LH.

**OK:**

The connectors are properly connected.

**NG****CONNECT CONNECTOR****OK**

## 2 CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the center airbag sensor and the side airbag sensor LH.
- (b) Using a service wire, connect K8-4 (BBL+) and K8-3 (BBL-) of connector C.

**NOTICE:****Do not forcibly insert the service wire into the terminals of the connector when connecting.**

- (c) Measure the resistance of the wire harness side connector.

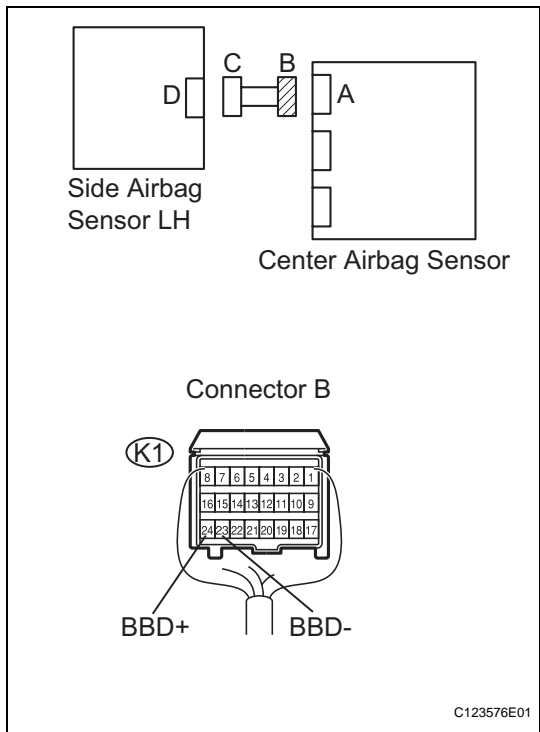
**Standard resistance**

Tester Connection	Specified Condition
K1-24 (BBD+) - K1-23 (BBD-)	Below 1 $\Omega$

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

3

CHECK FLOOR WIRE (SHORT)



- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
K1-24 (BBD+) - K1-23 (BBD-)	1 MΩ or higher

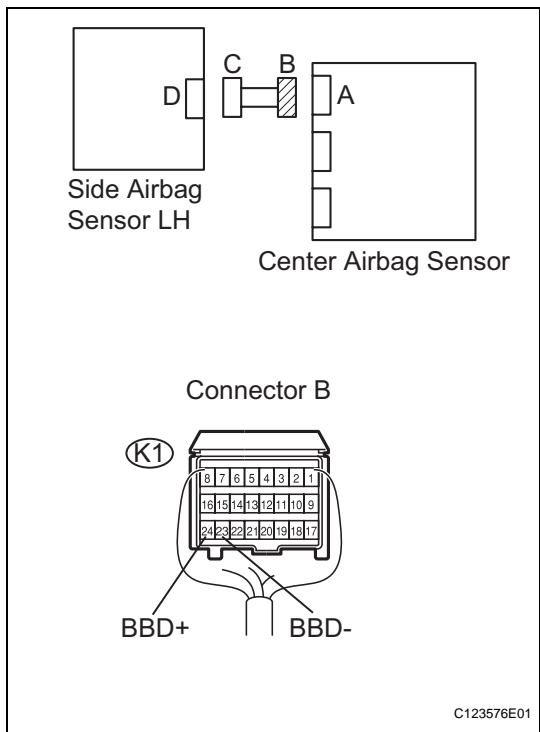
NG

REPAIR OR REPLACE FLOOR WIRE

OK

4

CHECK FLOOR WIRE (TO B+)



- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage of the wire harness side connector.

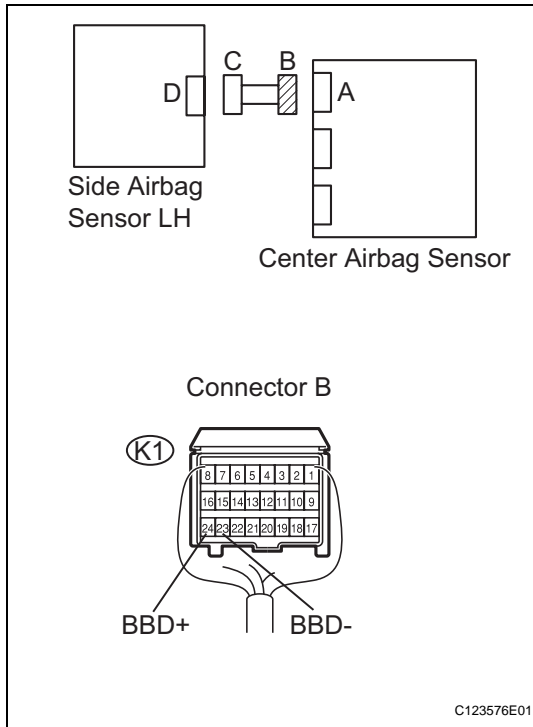
Standard voltage

Tester Connection	Specified Condition
K1-24 (BBD+) - Body ground	Below 1 V
K1-23 (BBD-) - Body ground	Below 1 V

NG

REPAIR OR REPLACE FLOOR WIRE

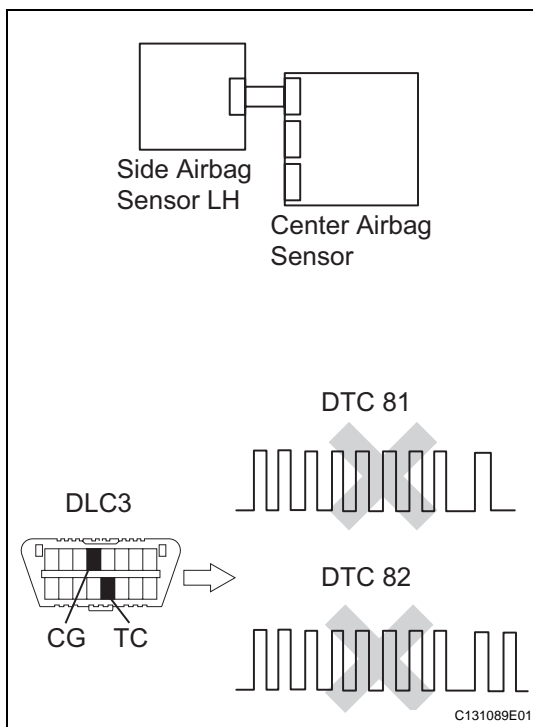
OK

**5 CHECK FLOOR WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
K1-24 (BBD+) - Body ground	1 M $\Omega$ or Higher
K1-23 (BBD-) - Body ground	1 M $\Omega$ or Higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****6 CHECK SIDE AIRBAG SENSOR LH**

- Connect the connectors to the center airbag sensor.
- Interchange the side airbag sensor RH with the side airbag sensor LH and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check for DTCs (see page RS-49).

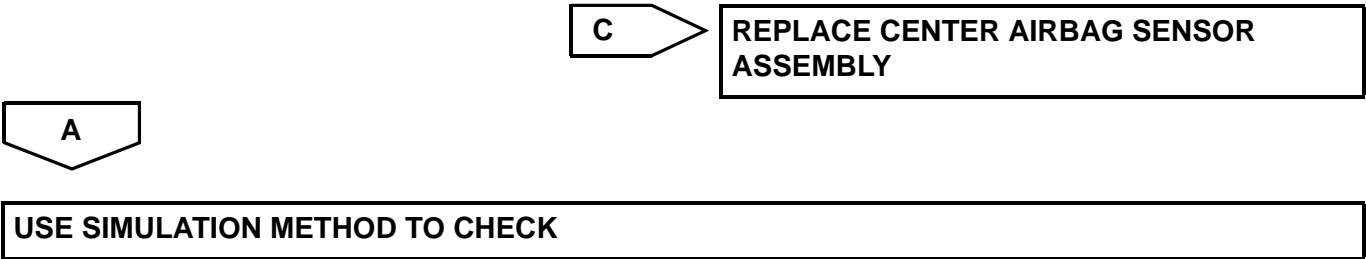
**Result**

Result	Proceed to
DTC B1622/81 and B1627/82 are not output.	A
DTC B1627/82 is output.	B
DTC B1622/81 is output.	C

**HINT:**

DTCs other than DTC B1622/81 and B1627/82 may be output at this time, but they are not related to this check.

**B****REPLACE SIDE AIRBAG SENSOR LH****RS**



<b>DTC</b>	<b>B1623/81</b>	<b>Driver Side - Side Airbag Sensor Assembly Initialization Incomplete</b>
<b>DTC</b>	<b>B1632/81</b>	<b>Lost Communication with Driver Side Rear Airbag Sensor</b>
<b>DTC</b>	<b>B1633/81</b>	<b>Driver Side Rear Airbag Sensor Initialization Incomplete</b>
<b>DTC</b>	<b>B1642/81</b>	<b>Lost Communication with Driver Side Satellite Sensor Bus</b>

**DESCRIPTION**

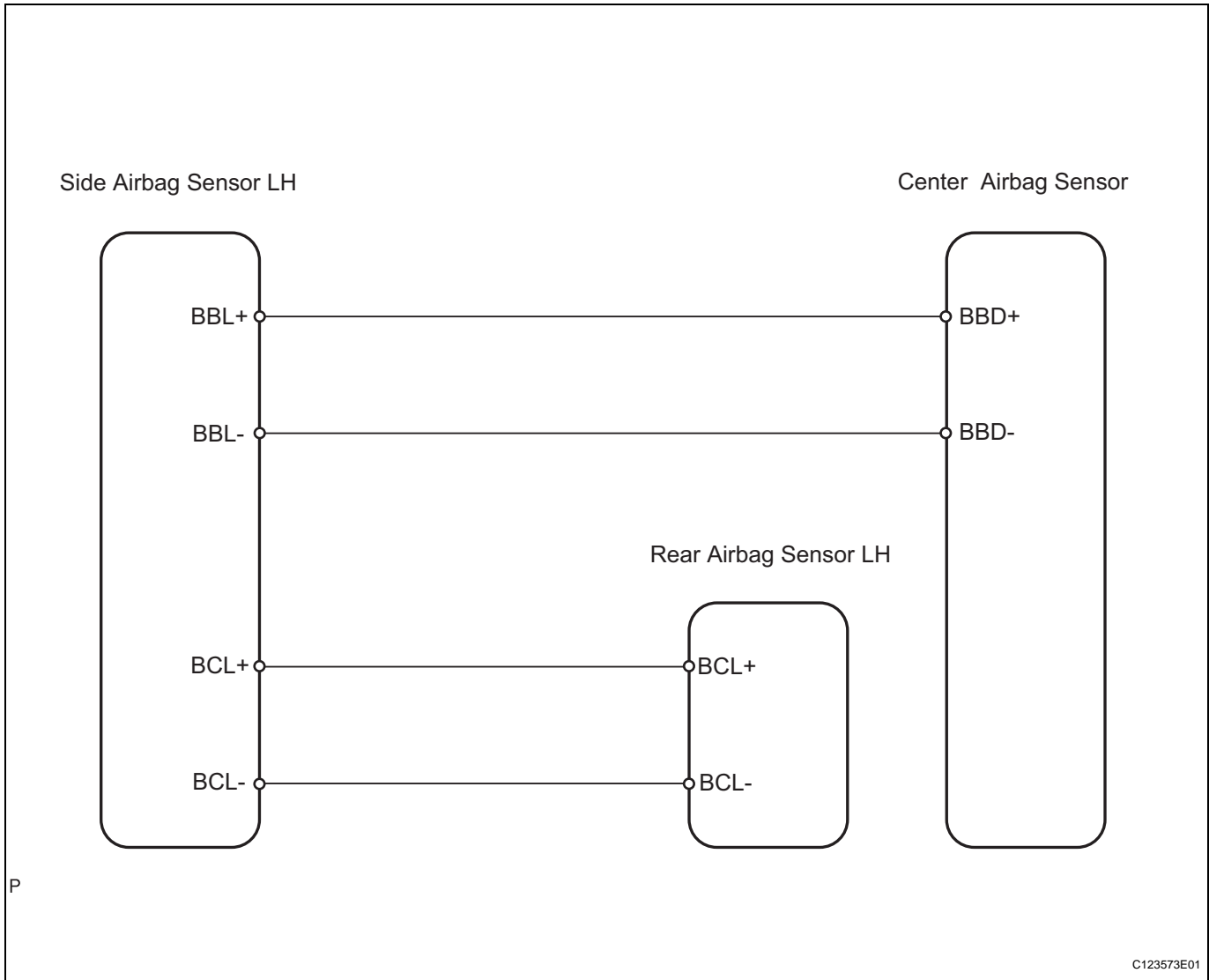
The side airbag sensor LH consists of part including the diagnostic circuit and the lateral deceleration sensor.

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1623/81, B1632/81, B1633/81 or B1642/81 is set when a malfunction is detected in the side airbag sensor LH circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1623/81 B1632/81 B1633/81 B1642/81	When one of following conditions is met: <ul style="list-style-type: none"> <li>Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in side airbag sensor LH circuit for 2 seconds.</li> <li>Side airbag sensor LH malfunction</li> <li>Center airbag sensor malfunction</li> </ul>	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Side airbag sensor LH</li> <li>Center airbag sensor</li> </ul>

## WIRING DIAGRAM

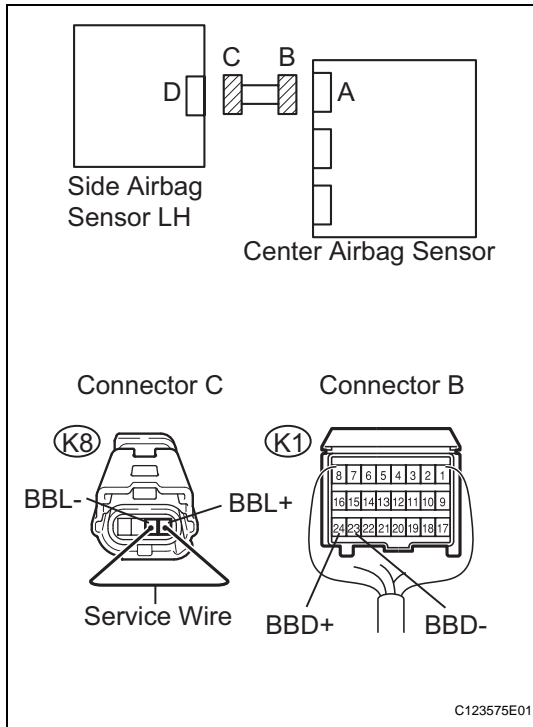


## INSPECTION PROCEDURE

1	CHECK CONNECTION OF CONNECTOR
---	-------------------------------

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Check that the connectors are properly connected to the center airbag sensor, rear airbag sensor LH and the side airbag sensor LH.

**OK:****The connectors are properly connected.****NG****CONNECT CONNECTOR****OK**

**2 CHECK FLOOR WIRE (OPEN)**

(a) Disconnect the connectors from the center airbag sensor and the side airbag sensor LH.

(b) Using a service wire, connect K8-4 (BBL+) and K8-3 (BBL-) of connector C.

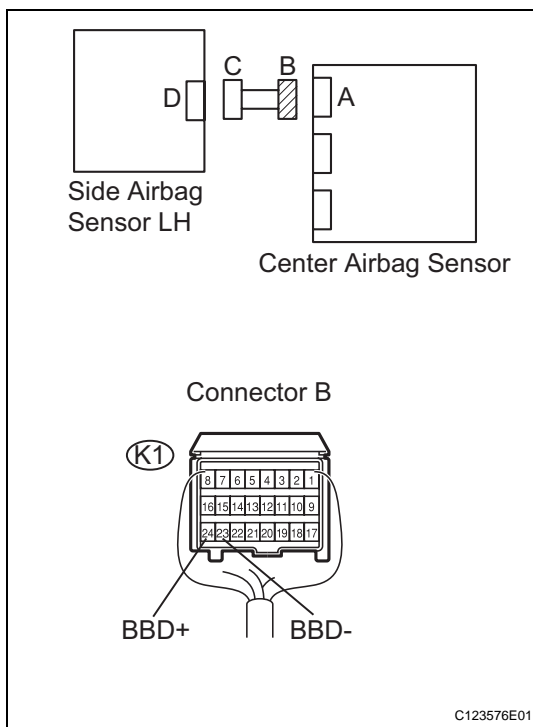
**NOTICE:**

**Do not forcibly insert the service wire into the terminals of the connector when connecting.**

(c) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
K1-24 (BBD+) - K1-23 (BBD-)	Below 1 $\Omega$

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****3 CHECK FLOOR WIRE (SHORT)**

(a) Disconnect the service wire from connector C.

(b) Measure the resistance of the wire harness side connector.

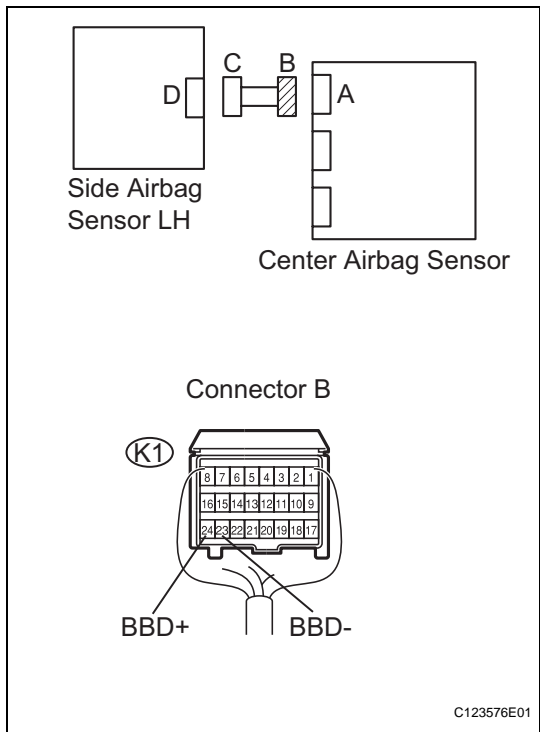
**Standard resistance**

Tester Connection	Specified Condition
K1-24 (BBD+) - K1-23 (BBD-)	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

4

CHECK FLOOR WIRE (TO B+)



- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
K1-24 (BBD+) - Body ground	Below 1 V
K1-23 (BBD-) - Body ground	Below 1 V

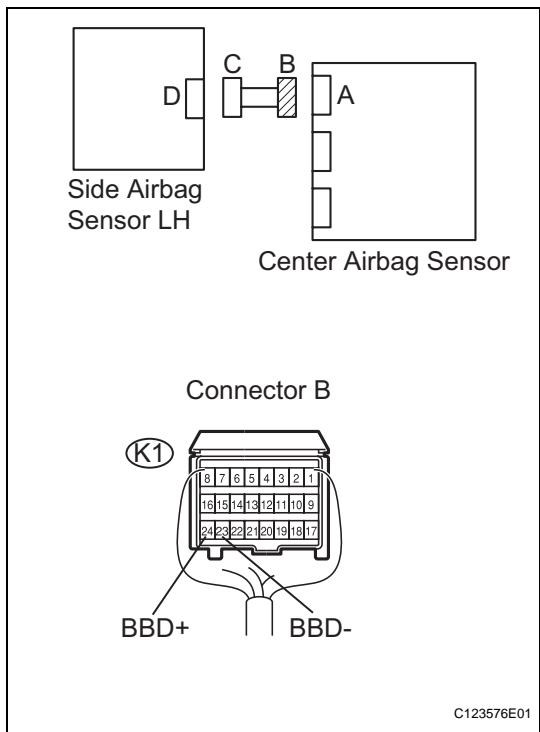
NG

REPAIR OR REPLACE FLOOR WIRE

OK

5

CHECK FLOOR WIRE (TO GROUND)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Measure the resistance of the wire harness side connector.
- Standard resistance**

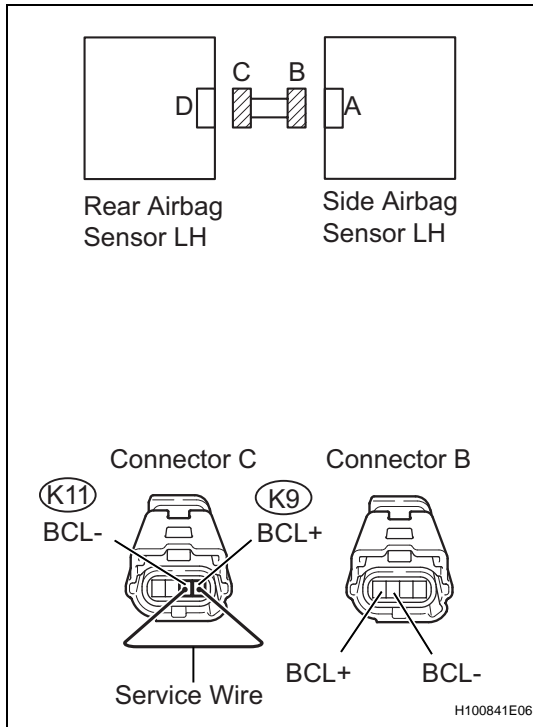
Tester Connection	Specified Condition
K1-24 (BBD+) - Body ground	1 MΩ or higher
K1-23 (BBD-) - Body ground	1 MΩ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

OK



**6 CHECK FLOOR WIRE (OPEN)**

- Disconnect the connectors from the side airbag sensor LH and the rear airbag sensor LH.
- Using a service wire, connect K11-1 (BCL-) and K11-2 (BCL+) of connector C.

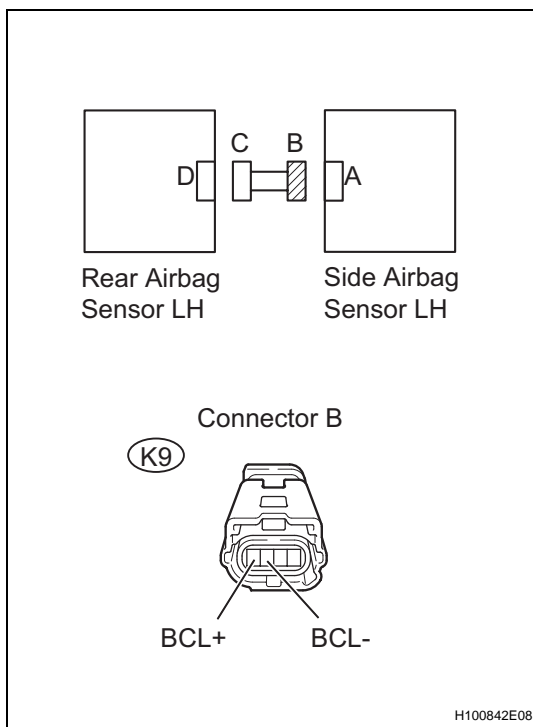
**NOTICE:**

**Do not forcibly insert the service wire into the terminals of the connector when connecting.**

- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
K9-1 (BCL+) - K9-2 (BCL-)	Below 1 $\Omega$

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****7 CHECK FLOOR WIRE (SHORT)**

- Disconnect the service wire from connector C.
- Measure the resistance of the wire harness side connector.

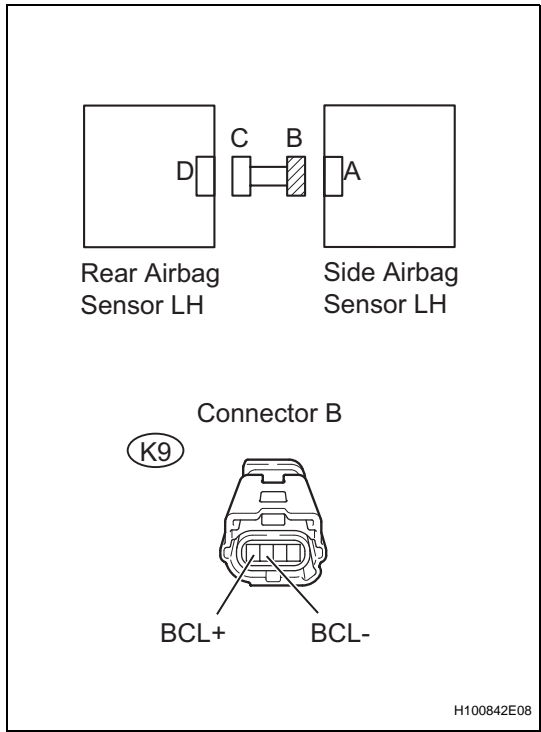
**Standard resistance**

Tester Connection	Specified Condition
K9-1 (BCL+) - K9-2 (BCL-)	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

8

CHECK FLOOR WIRE (TO B+)



- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
  - (b) Turn the ignition switch ON.
  - (c) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
K9-1 (BCL+) - Body ground	Below 1 V
K9-2 (BCL-) - Body ground	Below 1 V

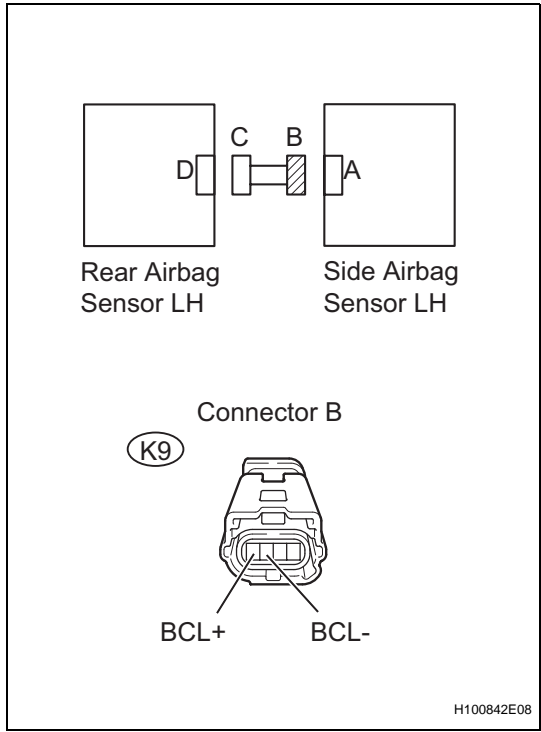
NG

REPAIR OR REPLACE FLOOR WIRE

OK

9

CHECK FLOOR WIRE (TO GROUND)



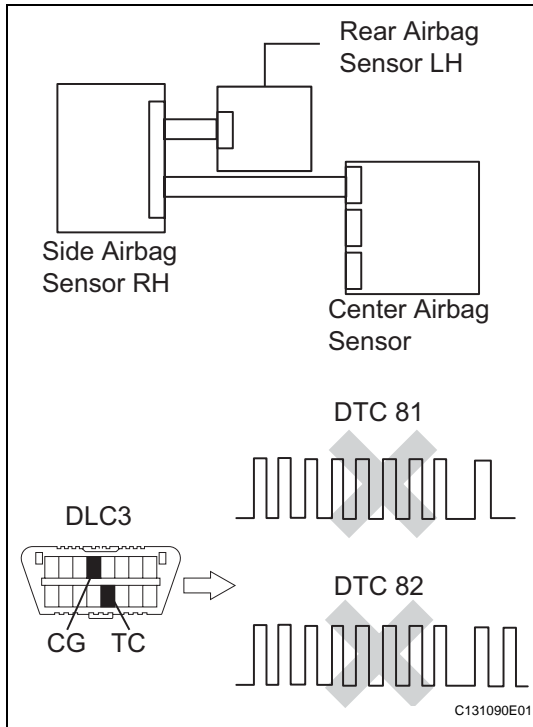
- (a) Turn the ignition switch OFF.
  - (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
  - (c) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
K9-1 (BCL+) - Body ground	1 MΩ or higher
K9-2 (BCL-) - Body ground	1 MΩ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

OK

**10 CHECK SIDE AIRBAG SENSOR RH**

- Connect the connectors to the center airbag sensor.
- Interchange the side airbag sensor RH with the side airbag sensor LH and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check for DTCs (see page RS-49).

**Result**

Result	Proceed to
DTC B1623/81, B1632/81, B1633/81, B1642/81, B1628/82, B1637/82, B1638/82 and B1647/82 is not output	A
DTC B1623/81, B1632/81, B1633/81 and B1642/81 are output	B
DTC B1628/82, B1637/82, B1638/82 and B1647/82 are output	C

**HINT:**

DTCs other than DTC B1623/81, B1632/81, B1633/81, B1642/81, B1628/82, B1637/82, B1638/82 and B1647/82 may be output at this time, but they are not relate to this check.

**B**

**REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

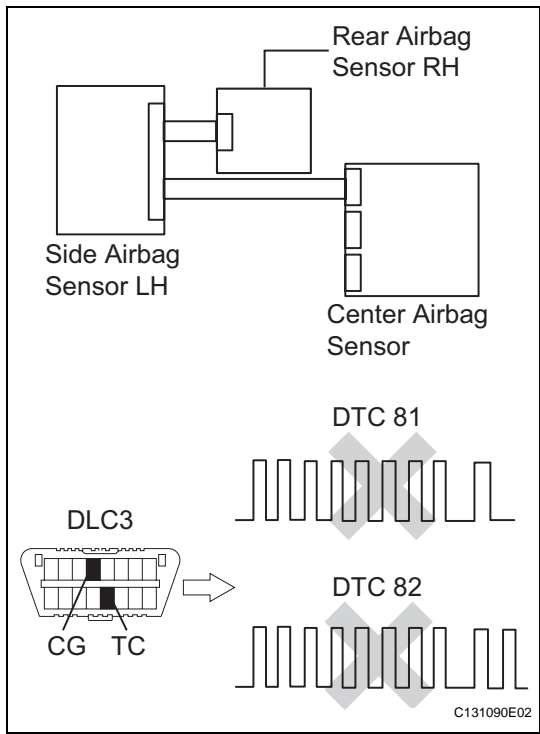
**C**

**REPLACE SIDE AIRBAG SENSOR RH**

**A****RS**

11

CHECK REAR AIRBAG SENSOR RH



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Interchange the rear airbag sensor RH with the rear airbag sensor LH and connect the connectors to them.
- (d) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (e) Turn the ignition switch ON, and wait for at least 60 seconds.
- (f) Clear the DTCs (see page RS-49).
- (g) Turn the ignition switch OFF.
- (h) Turn the ignition switch ON, and wait for at least 60 seconds.
- (i) Check the DTCs (see page RS-49).

Result

Result	Proceed to
DTC B1623/81, B1632/81, B1633/81, B1642/81, B1628/82, B1637/82, B1638/82 and B1647/82 is not output	A
DTC B1623/81, B1632/81, B1633/81 and B1642/81 are output	B
DTC B1628/82, B1637/82, B1638/82 and B1647/82 are output	C

HINT:  
DTCs other than DTC B1623/81, B1632/81, B1633/81, B1642/81, B1628/82, B1637/82, B1638/82 and B1647/82 may be output at this time, but they are not relate to this check.

RS

B

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

C

REPLACE REAR AIRBAG SENSOR RH

A

USE SIMULATION METHOD TO CHECK

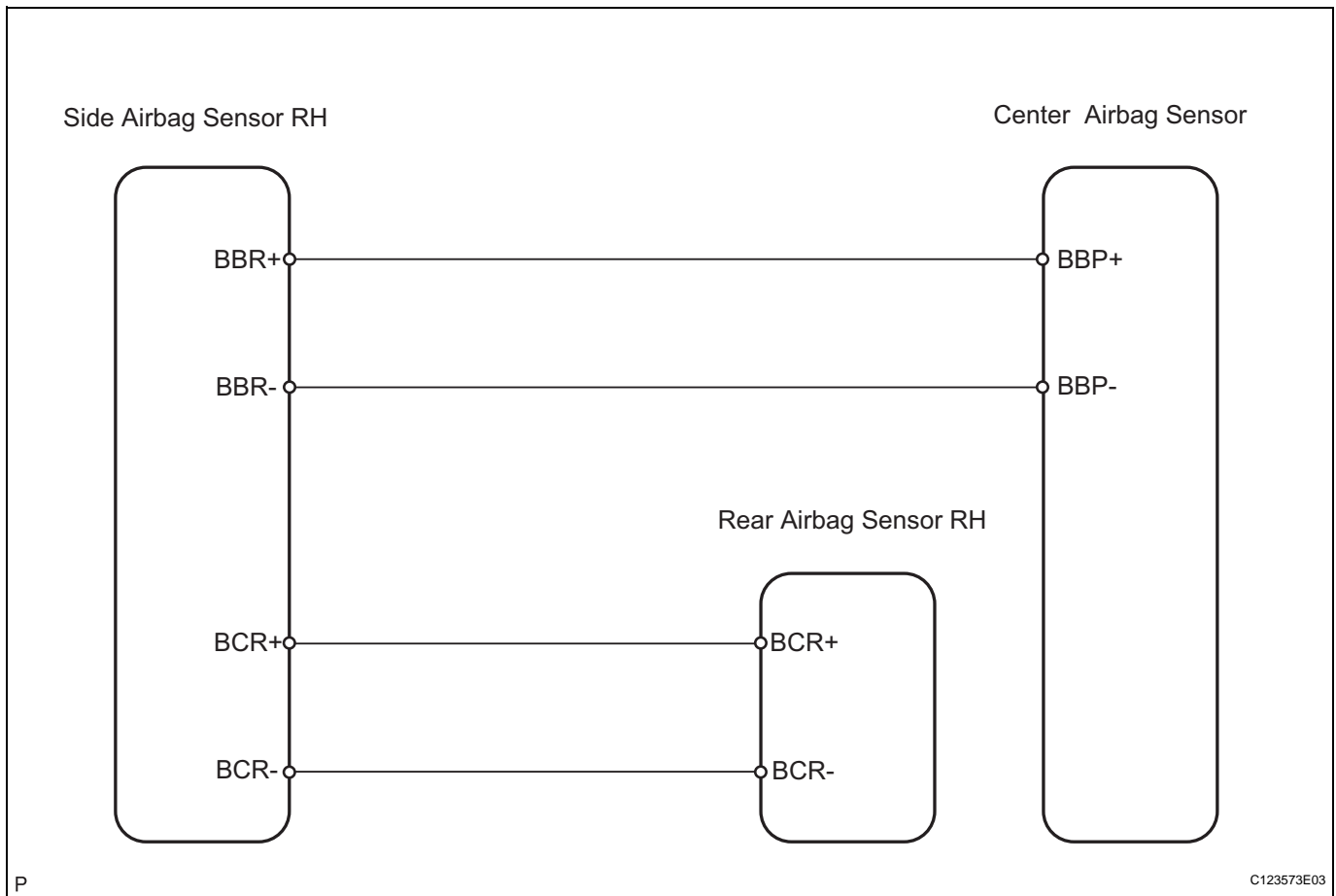
**DTC****B1625/22****Front Passenger Side - Side Airbag Sensor Circuit Malfunction****DESCRIPTION**

The side airbag sensor RH consists of parts including the diagnostic circuit and the lateral deceleration sensor.

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

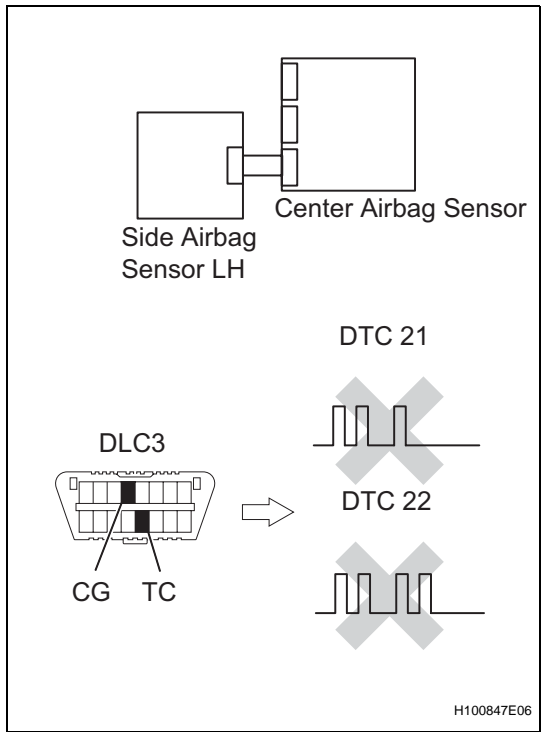
DTC B1625/22 is set when a malfunction is detected in the side airbag sensor RH circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1625/22	When one of following conditions is met: <ul style="list-style-type: none"> <li>Side airbag sensor RH malfunction</li> <li>Center airbag sensor malfunction</li> </ul>	<ul style="list-style-type: none"> <li>Side airbag sensor RH</li> <li>Center airbag sensor</li> </ul>

**WIRING DIAGRAM****RS**

INSPECTION PROCEDURE

1CHECK SIDE AIRBAG SENSOR RH



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Interchange the side airbag sensor RH and the side airbag sensor LH, and connect the connectors to them.
- (d) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (e) Turn the ignition switch ON, and wait for at least 60 seconds.
- (f) Clear the DTCs (see page RS-49).
- (g) Turn the ignition switch OFF.
- (h) Turn the ignition switch ON, and wait for at least 60 seconds.
- (i) Check the DTCs (see page RS-49).

Result

Result	Proceed to
DTC B1620/21 and B1625/22 are not output.	A
DTC B1620/21 is output.	B
DTC B1625/22 is output.	C

DTCs other than DTC B1620/21 and B1625/22 may be output at this time, but they are not related to this check.

B

REPLACE SIDE AIRBAG SENSOR RH

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

RS

A

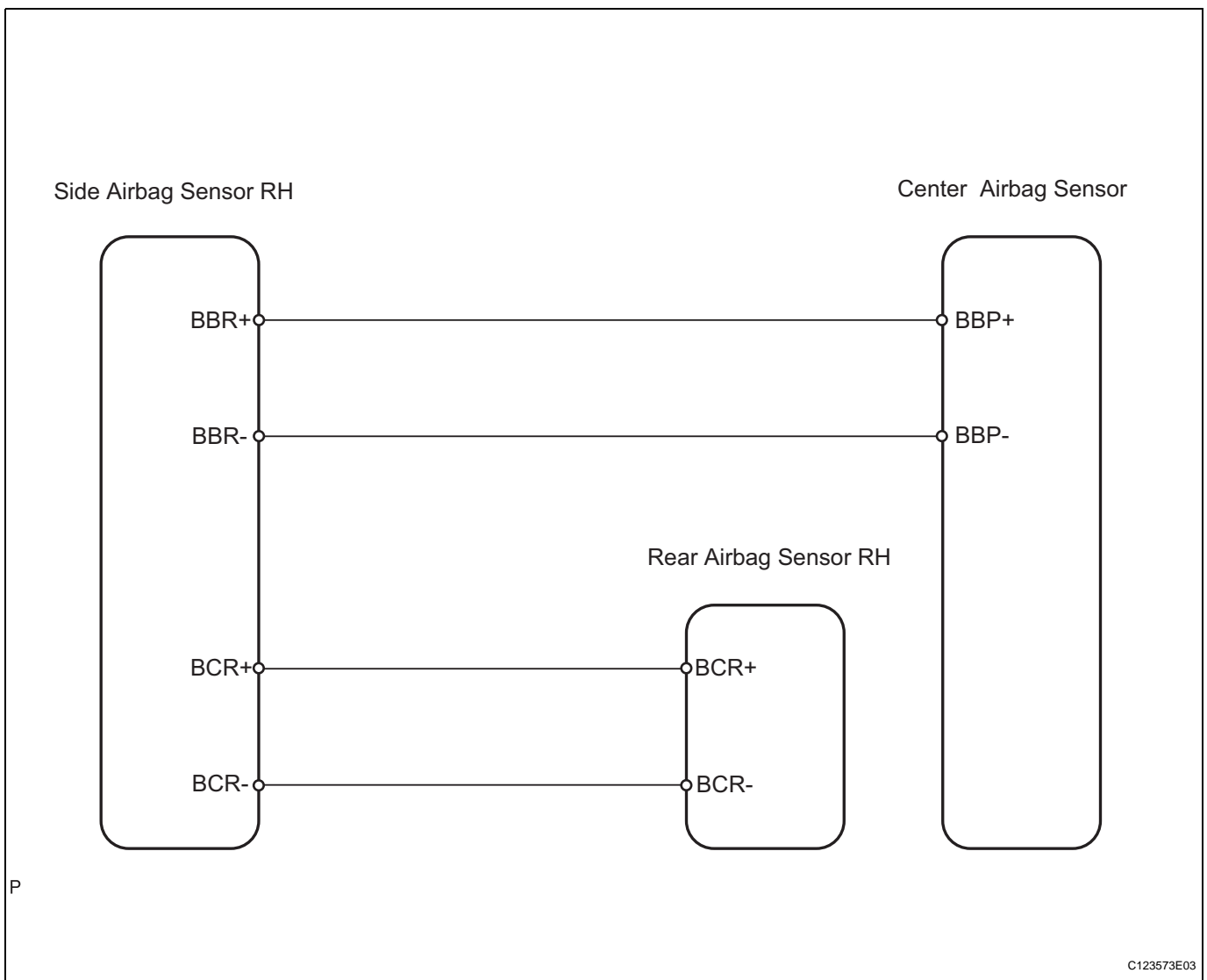
USE SIMULATION METHOD TO CHECK

**DTC****B1627/82****Lost Communication with Front Passenger Side - Side Airbag Sensor Assembly****DESCRIPTION**

The side airbag sensor RH consists of parts including the diagnostic circuit and the lateral deceleration sensor.

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1627/82 is set when a malfunction is detected in the side airbag sensor RH circuit.

**WIRING DIAGRAM****RS****INSPECTION PROCEDURE****1****CHECK CONNECTION OF CONNECTOR**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

- (c) Check that the connectors are properly connected to the center airbag sensor, rear airbag sensor RH and the side airbag sensor RH.

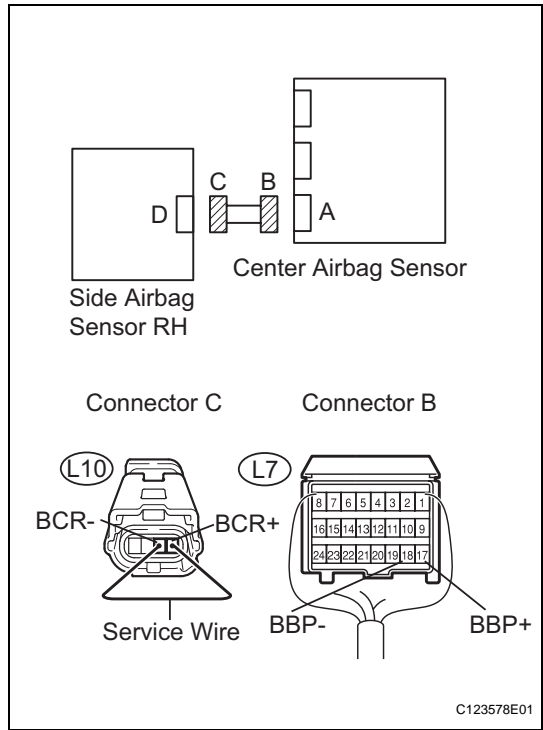
**OK:**  
The connectors are properly connected.

NG

CONNECT CONNECTOR

OK

2CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the center airbag sensor and the side airbag sensor RH.
- (b) Using a service wire, connect L10-4 (BBR+) and L10-3 (BBR-) of connector C.

**NOTICE:**  
Do not forcibly insert the service wire into the terminals of the connector when connecting.

- (c) Measure the resistance of the wire harness side connectors.

**Standard resistance**

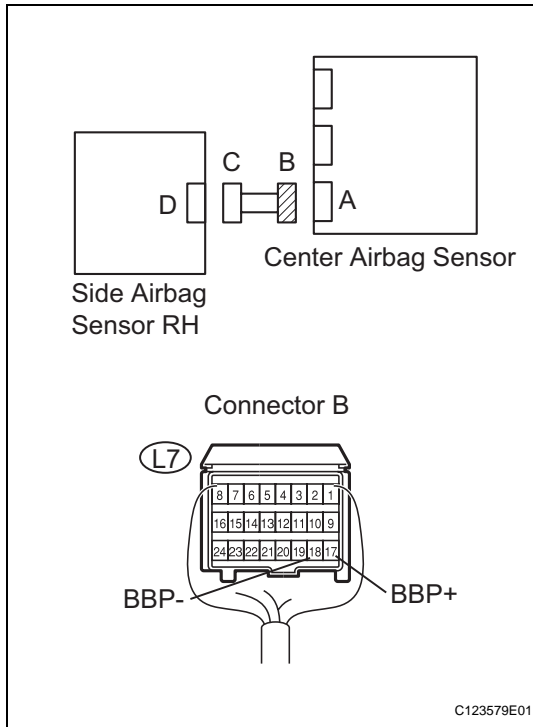
Tester Connection	Specified Condition
L7-17 (BBP+) - L7-18 (BBP-)	Below 1 Ω

NG

REPAIR OR REPLACE FLOOR WIRE

OK

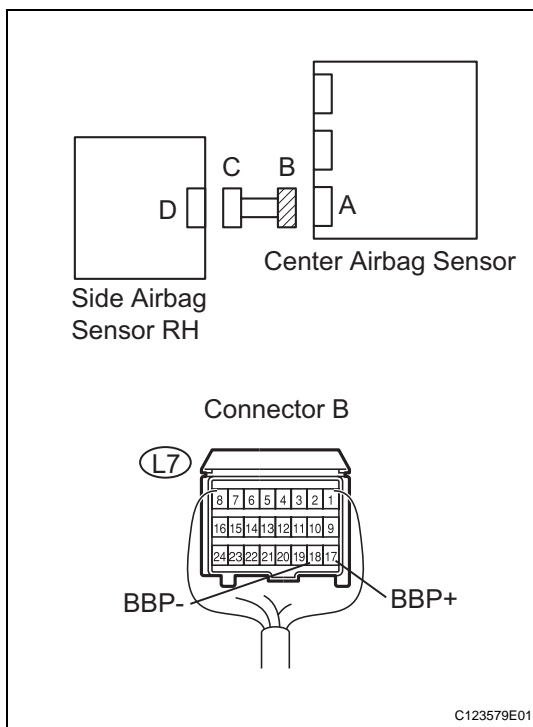


**3 CHECK FLOOR WIRE (SHORT)**

- Disconnect the service wire from connector C.
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
L7-17 (BBP+) - L7-18(BBP-)	1 MΩ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****4 CHECK FLOOR WIRE (TO B+)**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

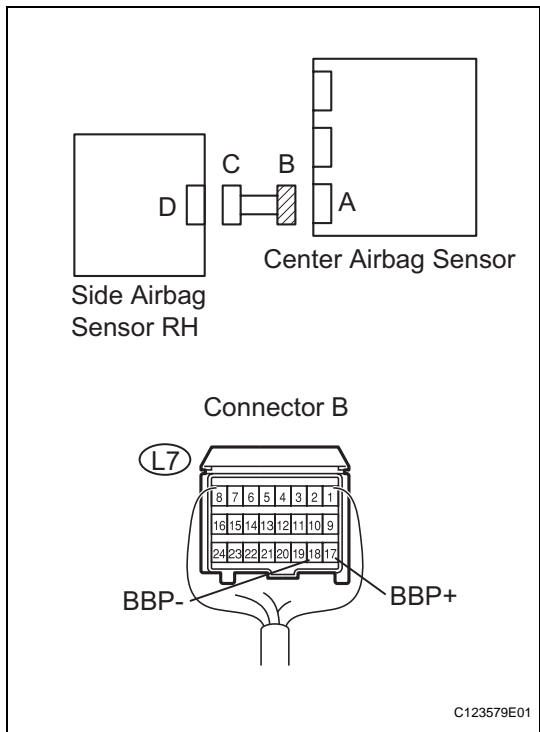
**Standard voltage**

Tester Connection	Specified Condition
L7-17 (BBP+) - Body ground	Below 1 V
L7-18 (BBP-) - Body ground	Below 1 V

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

5

CHECK FLOOR WIRE (TO GROUND)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
L7-17 (BBP+) - Body ground	1 MΩ or higher
L7-18 (BBP-) - Body ground	1 MΩ or higher

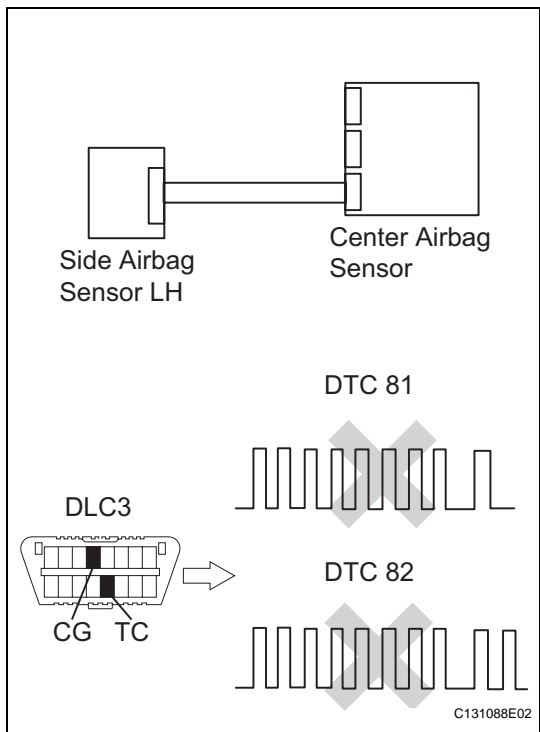
NG

REPAIR OR REPLACE FLOOR WIRE

OK

6

CHECK SIDE AIRBAG SENSOR RH



- (a) Connect the connectors to the center airbag sensor.
- (b) Interchange the side airbag sensor RH with the side airbag sensor LH and connect the connectors to them.
- (c) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (d) Turn the ignition switch ON, and wait for at least 60 seconds.
- (e) Clear the DTCs (see page RS-49).
- (f) Turn the ignition switch OFF.
- (g) Turn the ignition switch ON, and wait for at least 60 seconds.
- (h) Check for DTCs (see page RS-49).

Result

Result	Proceed to
DTC B1622/81 and B1627/82 are not output	A
DTC B1622/81 is output	B
DTC B1627/82 is output	C

HINT:  
DTCs other than DTC B1622/81 and B1627/82 may be output at this time, but they are not related to this check.

B

REPLACE SIDE AIRBAG SENSOR RH



C

**REPLACE CENTER AIRBAG SENSOR  
ASSEMBLY**

A

**USE SIMULATION METHOD TO CHECK**

<b>DTC</b>	<b>B1628/82</b>	<b>Front Passenger Side - Side Airbag Sensor Assembly Initialization Incomplete</b>
<b>DTC</b>	<b>B1637/82</b>	<b>Lost Communication with Passenger Side Rear Airbag Sensor</b>
<b>DTC</b>	<b>B1638/82</b>	<b>Passenger Side Rear Airbag Sensor Initialization Incomplete</b>
<b>DTC</b>	<b>B1647/82</b>	<b>Lost Communication with Front Passenger Side Satellite Sensor Bus</b>

## DESCRIPTION

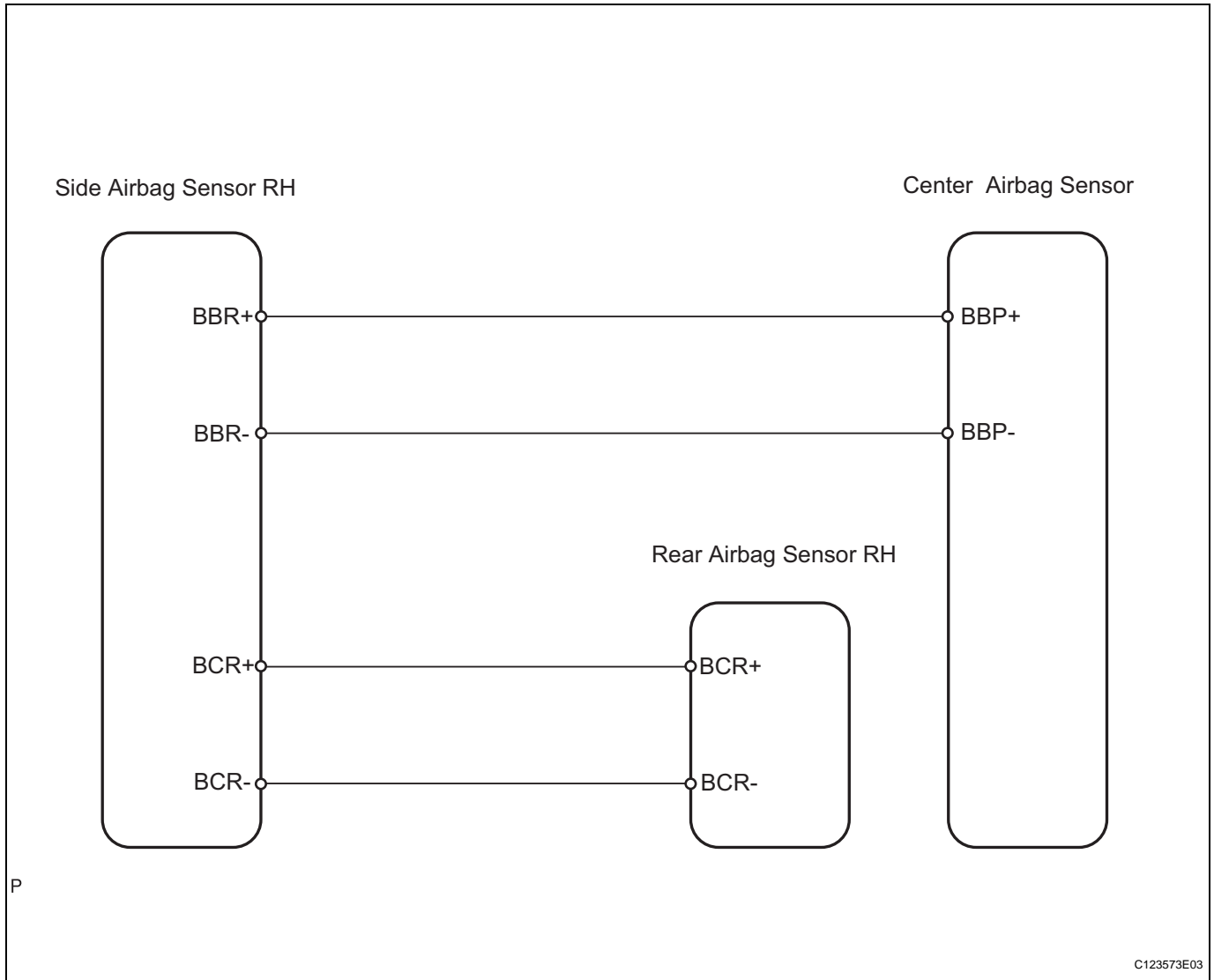
The side airbag sensor RH consists of parts including the diagnostic circuit and the lateral deceleration sensor.

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1628/82, B1637/82, B1638/82 or B1647/82 is set when a malfunction is detected in the side airbag sensor RH circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1628/82 B1637/82 B1638/82 B1647/82	When one of following conditions is met: <ul style="list-style-type: none"> <li>Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in side airbag sensor RH circuit for 2 seconds.</li> <li>Side airbag sensor RH malfunction</li> <li>Center airbag sensor malfunction</li> </ul>	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Side airbag sensor RH</li> <li>Center airbag sensor</li> </ul>

## WIRING DIAGRAM



## INSPECTION PROCEDURE

1

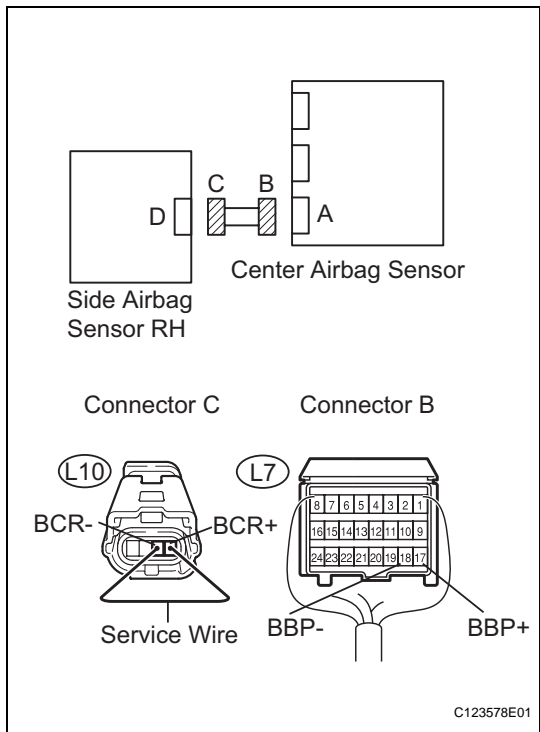
## CHECK CONNECTION OF CONNECTOR

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Check that the connectors are properly connected to the center airbag sensor, rear airbag sensor RH and the side airbag sensor RH.

**OK:****The connectors are properly connected.****NG****CONNECT CONNECTOR****OK**

2

CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the center airbag sensor and the side airbag sensor RH.
- (b) Using a service wire, connect L10-4 (BBR+) and L10-3 (BBR-) of connector C.
- NOTICE:**  
Do not forcibly insert the service wire into the terminals of the connector when connecting.
- (c) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
L7-17 (BBP+) - L7-18 (BBP-)	Below 1 Ω

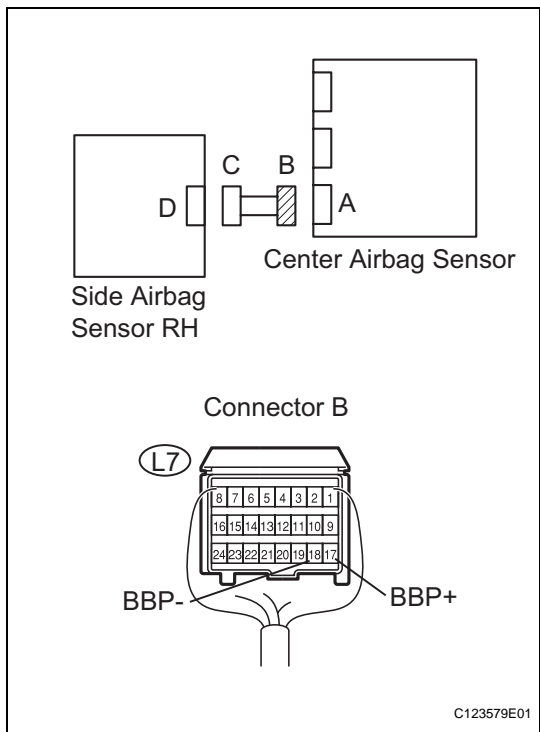
NG

REPAIR OR REPLACE FLOOR WIRE

OK

3

CHECK FLOOR WIRE (SHORT)



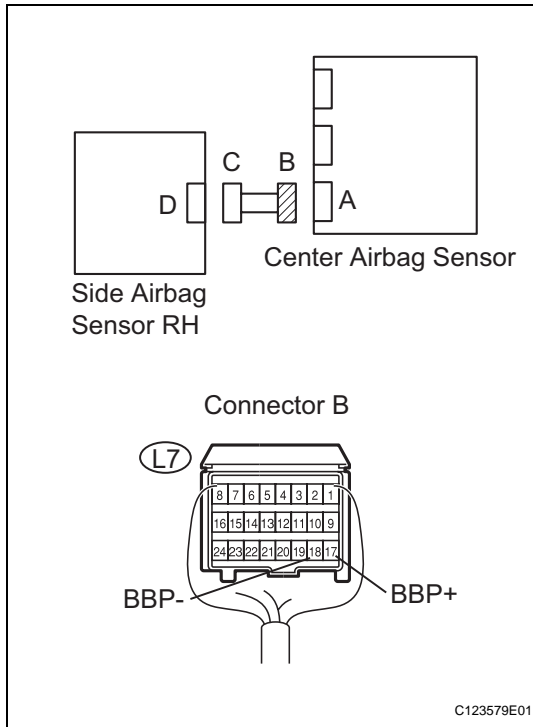
- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
L7-17 (BBP+) - L7-18 (BBP-)	1 MΩ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

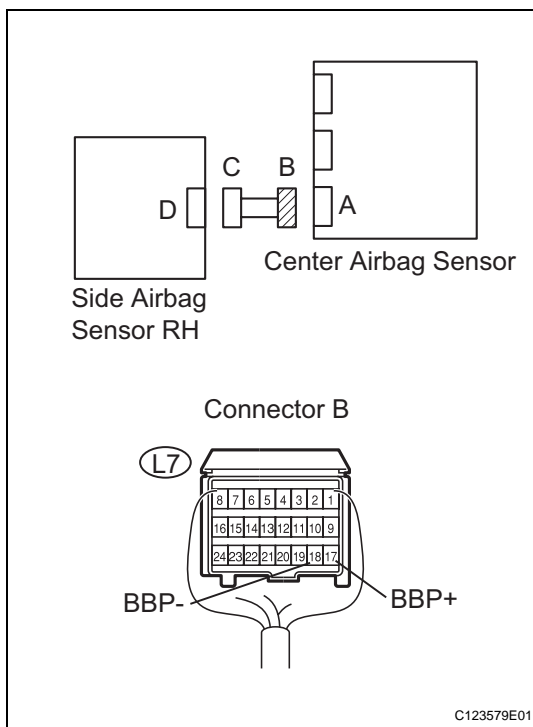
OK

**4 CHECK FLOOR WIRE (TO B+)**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
L7-17 (BBP+) - Body ground	Below 1 V
L7-18 (BBP-) - Body ground	Below 1 V

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****5 CHECK FLOOR WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

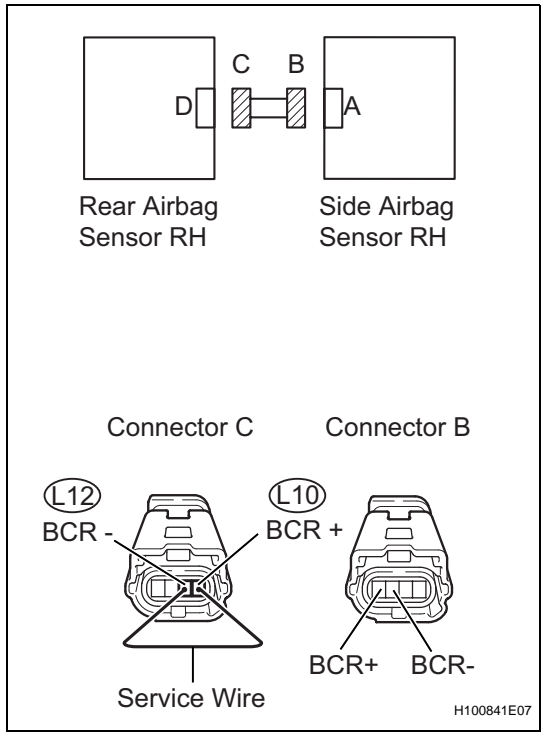
**Standard resistance**

Tester Connection	Specified Condition
L7-17 (BBP+) - Body ground	1 M $\Omega$ or higher
L7-18 (BBP-) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

6

CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the side airbag sensor RH and the rear airbag sensor RH.
- (b) Using a service wire, connect L12-1 (BCR-) and L12-2 (BCR+) of connector C.

**NOTICE:**  
**Do not forcibly insert the service wire into the terminals of the connector when connecting.**

- (c) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
L10-1 (BCR+) - L10-2 (BCR-)	Below 1 Ω

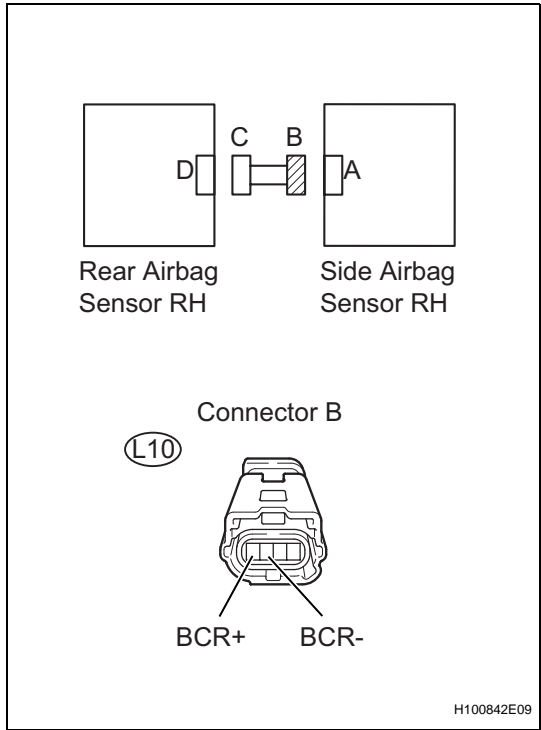
NG

REPAIR OR REPLACE FLOOR WIRE

OK

7

CHECK FLOOR WIRE (SHORT)



- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance of the wire harness side connectors.

**Standard resistance**

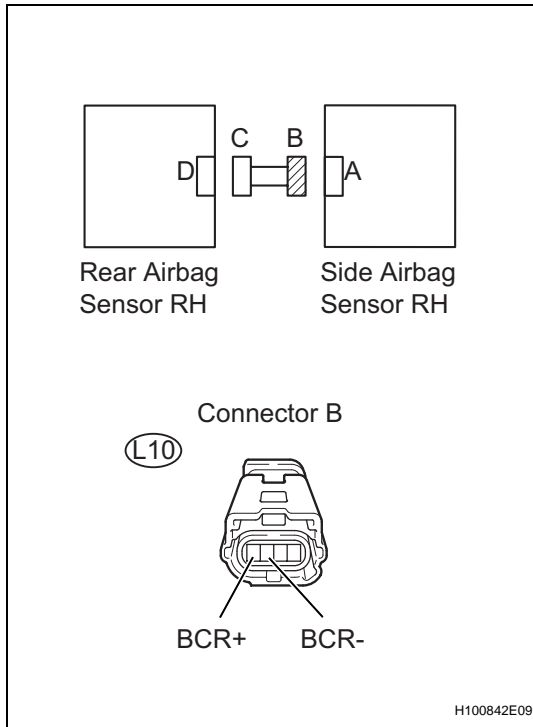
Tester Connection	Specified Condition
L10-1 (BCR+) - L10-2 (BCR-)	1 MΩ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

OK

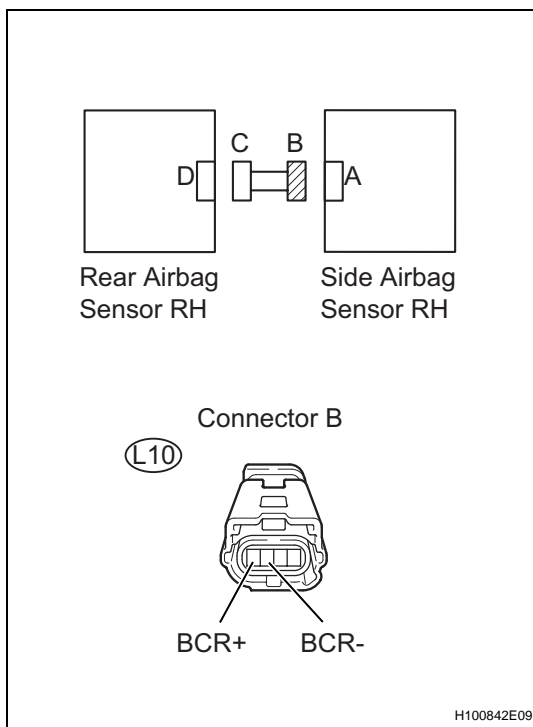


**8 CHECK FLOOR WIRE (TO B+)**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
L10-1 (BCR+) - Body ground	Below 1 V
L10-2 (BCR-) - Body ground	Below 1 V

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****9 CHECK FLOOR WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

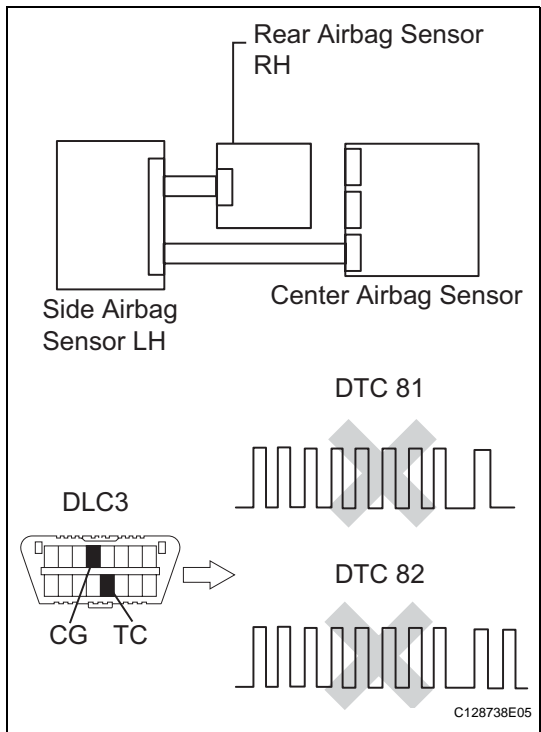
**Standard resistance**

Tester Connection	Specified Condition
L10-1 (BCR+) - Body ground	1 M $\Omega$ or higher
L10-2 (BCR-) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

10

CHECK SIDE AIRBAG SENSOR RH



- (a) Connect the connectors to the center airbag sensor .
- (b) Interchange the side airbag sensor LH with the side airbag sensor RH and connect the connectors to them.
- (c) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (d) Turn the ignition switch ON, and wait for at least 60 seconds.
- (e) Clear the DTCs (see page RS-49).
- (f) Turn the ignition switch OFF.
- (g) Turn the ignition switch ON, and wait for at least 60 seconds.
- (h) Check for DTCs (see page RS-49).

Result

Result	Proceed to
DTC B1623/81, B1632/81, B1633/81, B1642/81, B1628/82, B1637/82, B1638/82 and B1647/82 are not output	A
DTC B1628/82, B1637/82, B1638/82 and B1647/82 are output	B
DTC B1623/81, B1632/81, B1633/81 and B1642/81 are output	C

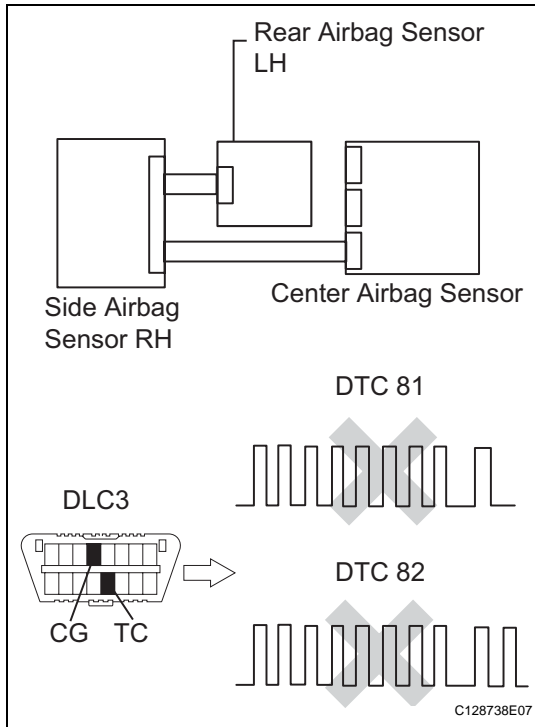
HINT:  
DTCs other than DTC B1623/81, B1632/81, B1633/81, B1642/81, B1628/82, B1637/82, B1638/82 and B1647/82 may be output at this time, but they are not related to this check.

- B

REPLACE CENTER AIRBAG SENSOR ASSEMBLY
- C

REPLACE SIDE AIRBAG SENSOR RH

A

**11 CHECK REAR AIRBAG SENSOR RH**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Interchange the rear airbag sensor RH with the rear airbag sensor LH and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**Result**

Result	Proceed to
DTC B1623/81, B1632/81, B1633/81, B1642/81, B1628/82, B1637/82, B1638/82 and B1647/82 are not output	A
DTC B1628/82, B1637/82, B1638/82 and B1647/82 are output	B
DTC B1623/81, B1632/81, B1633/81 and B1642/81 are output	C

**HINT:**

DTCs other than DTC B1623/81, B1632/81, B1633/81, B1642/81, B1628/82, B1637/82, B1638/82 and B1647/82 may be output at this time, but they are not related to this check.

**B****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****C****REPLACE REAR AIRBAG SENSOR RH****A****RS****USE SIMULATION METHOD TO CHECK**

DTC	B1630/23	Driver Side Rear Airbag Sensor Circuit Malfunction
-----	----------	--

**DESCRIPTION**

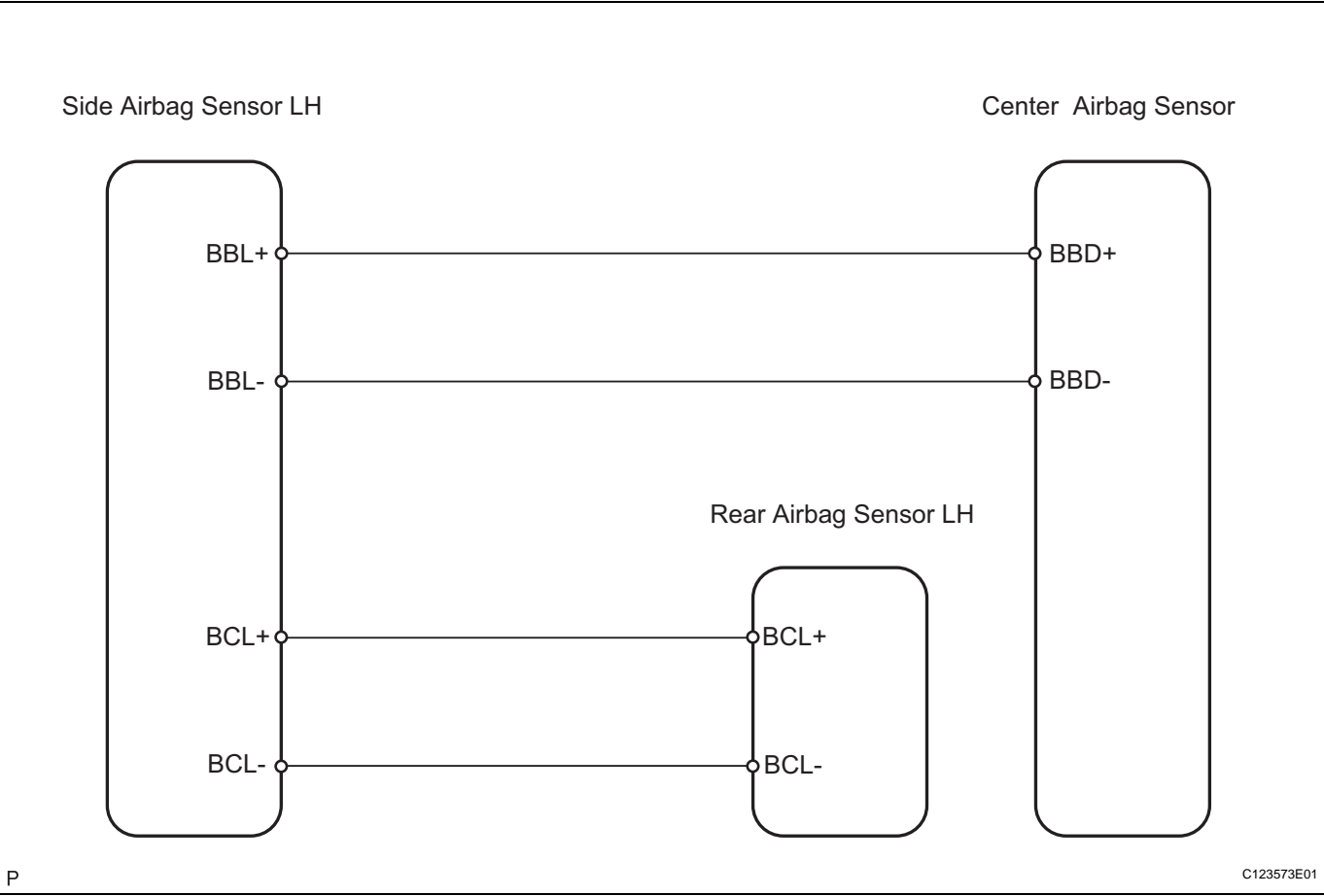
The rear airbag sensor LH consists of parts including the diagnostic circuit and the lateral deceleration sensor.

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

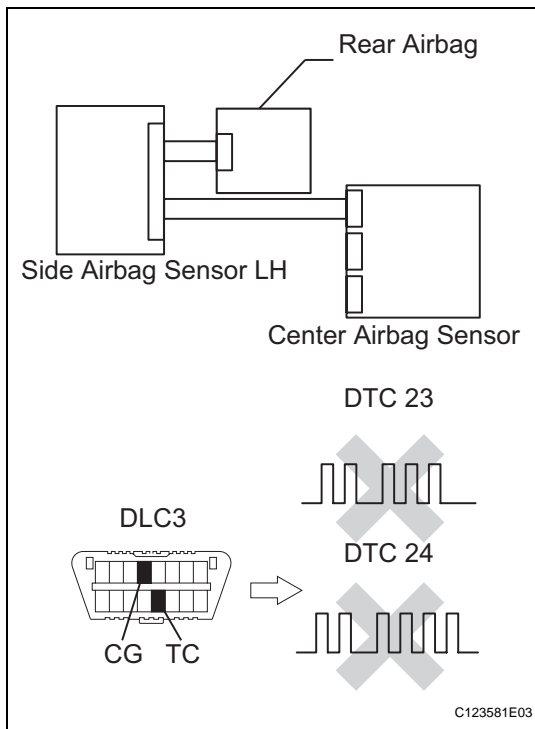
DTC B1630/23 is recorded when a malfunction is detected in the rear airbag sensor LH circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1630/23	When one of following conditions is met: <ul style="list-style-type: none"><li>Rear airbag sensor LH malfunction</li><li>Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>Rear airbag sensor LH</li><li>Center airbag sensor</li></ul>

WIRING DIAGRAM



## INSPECTION PROCEDURE

**1 CHECK REAR AIRBAG SENSOR LH**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Interchange the side airbag sensor RH with the side airbag sensor LH and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**Result**

Result	Proceed to
DTC B1630/23 and B1635/24 are not output.	A
DTC B1630/23 is output.	B
DTC B1635/24 is output.	C

**HINT:**

DTCs other than DTC B1630/23 and B1635/24 may be output at this time, but they are not related to this check.

**B****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****C****REPLACE REAR AIRBAG SENSOR LH****A****RS****USE SIMULATION METHOD TO CHECK**

DTC	B1635/24	Front Passenger Side Rear Airbag Sensor Circuit Malfunction
-----	----------	---

**DESCRIPTION**

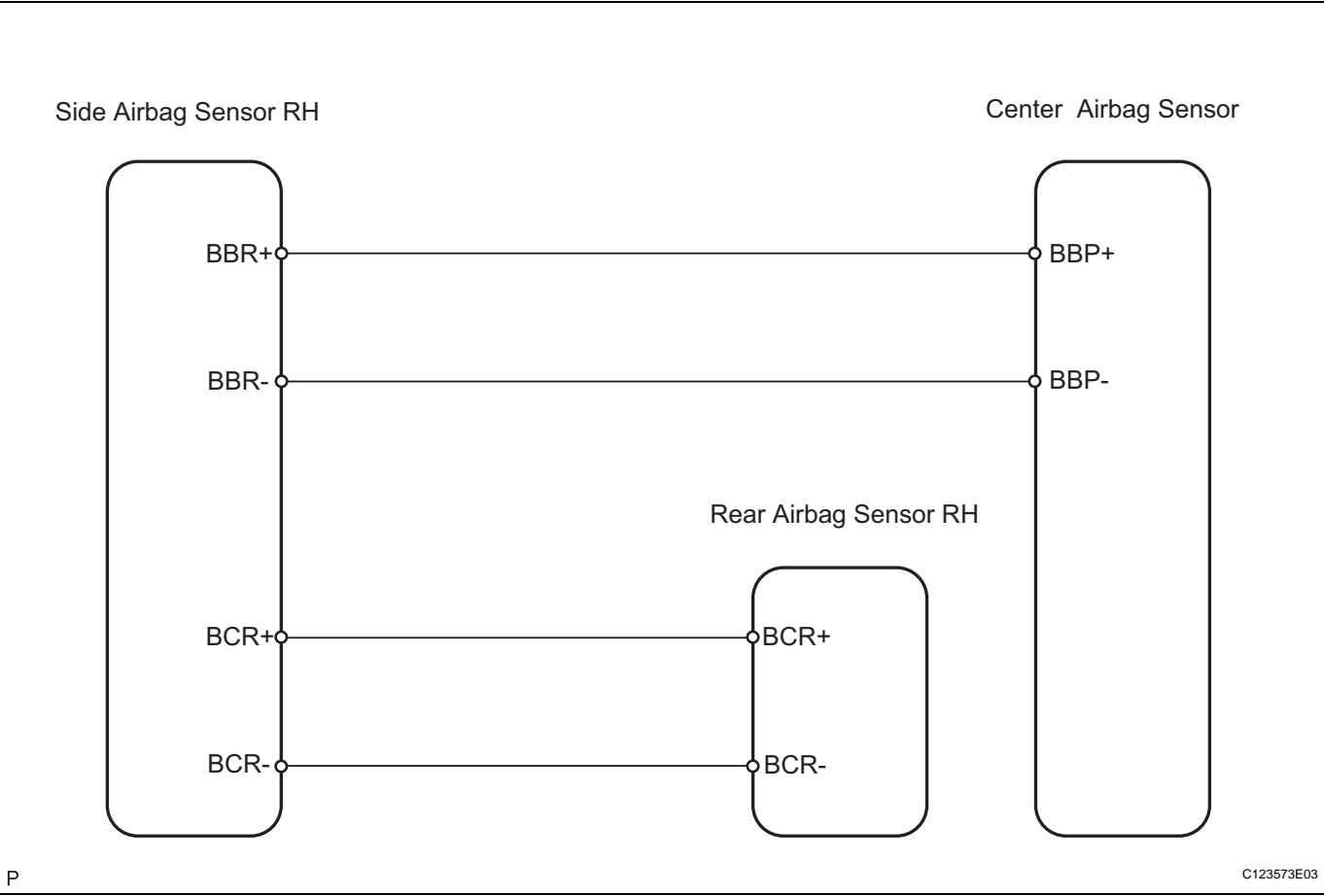
The rear airbag sensor RH consists of parts including the diagnostic circuit and the lateral deceleration sensor.

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

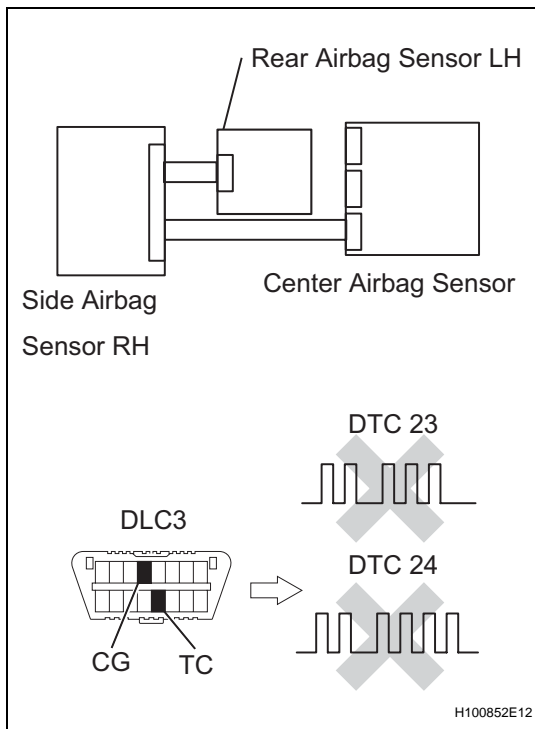
DTC B1635/24 is recorded when a malfunction is detected in the rear airbag sensor RH circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1635/24	When one of following conditions is met: <ul style="list-style-type: none"><li>• Rear airbag sensor RH malfunction</li><li>• Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>• Rear airbag sensor RH</li><li>• Center airbag sensor</li></ul>

WIRING DIAGRAM



## INSPECTION PROCEDURE

**1 CHECK REAR AIRBAG SENSOR RH**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Interchange the side airbag sensor RH with the side airbag sensor LH and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**Result**

Result	Proceed to
DTC B1630/23 and B1635/24 are not output.	A
DTC B1630/23 is output.	B
DTC B1635/24 is output.	C

DTCs other than DTC B1630/23 and B1635/24 may be output at this time, but they are not related to this check.

**B****REPLACE REAR AIRBAG SENSOR RH****C****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****A****RS****USE SIMULATION METHOD TO CHECK**

DTC	B1643/81	Driver Side Satellite Sensor Bus Initialization Incomplete
-----	----------	--

**DESCRIPTION**

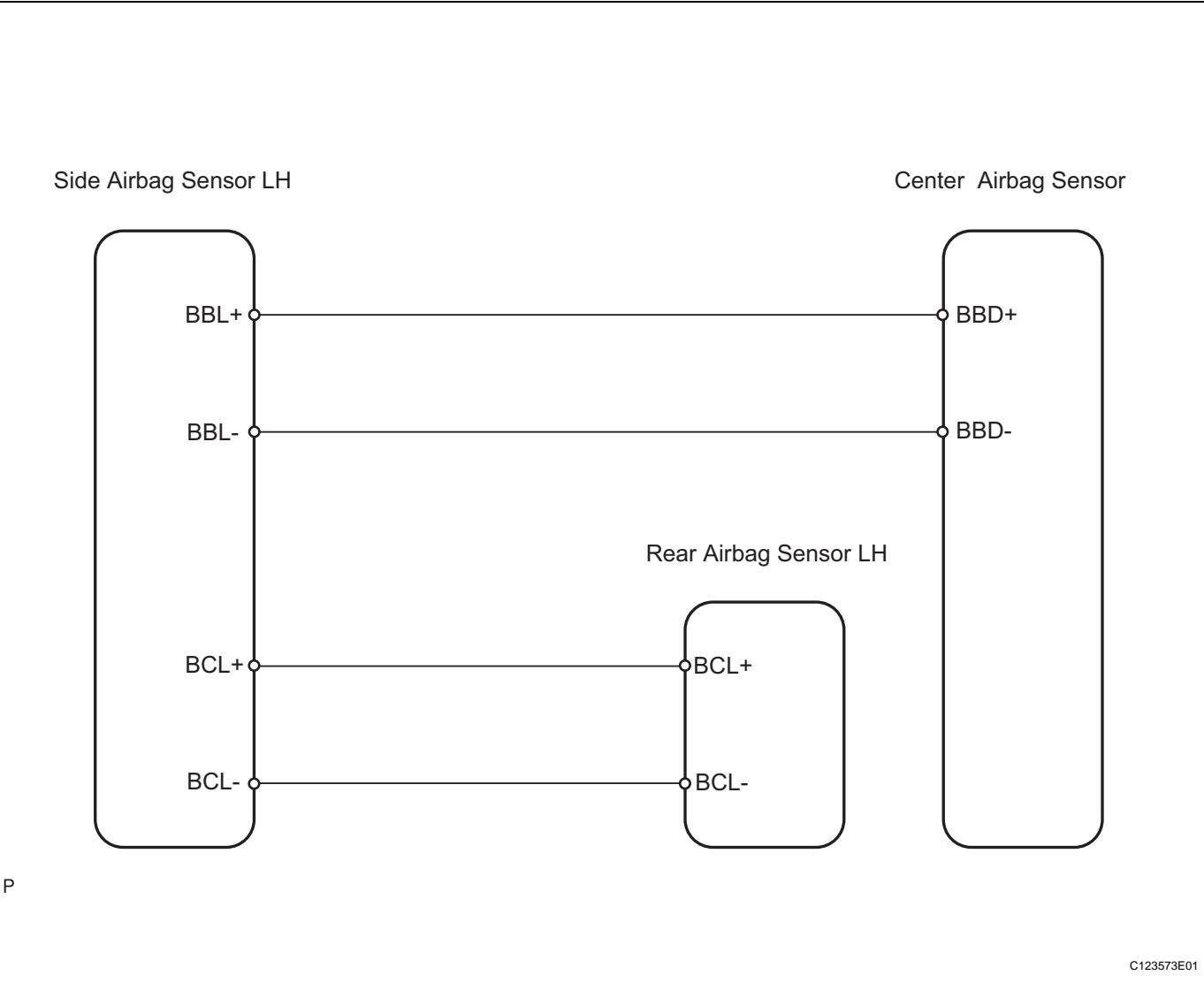
The side airbag sensor LH consists of part including the diagnostic circuit and the lateral deceleration sensor.

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1643/81 is set when a malfunction is detected in the side airbag sensor LH circuit.

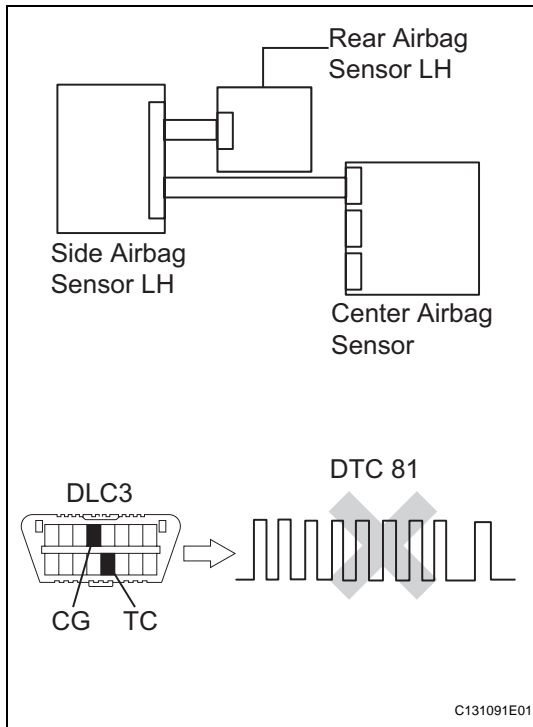
DTC No.	DTC Detection Condition	Trouble Area
B1643/81	When one of following conditions is met: <ul style="list-style-type: none"><li>Center airbag sensor detects open circuit signal in side airbag sensor LH circuit for 2 seconds.</li><li>Side airbag sensor LH malfunction</li><li>Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>Floor wire</li><li>Side airbag sensor LH</li><li>Center airbag sensor</li></ul>

WIRING DIAGRAM





## INSPECTION PROCEDURE

**1 CHECK FOR DTC**

- (a) Turn the ignition switch ON, and wait for at least 60 seconds.
- (b) Clear the DTCs (see page RS-49).
- (c) Turn the ignition switch OFF.
- (d) Turn the ignition switch ON, and wait for at least 60 seconds.
- (e) Check the DTCs (see page RS-49).

**OK:****DTC B1622/81 is not output.****DTC B1632/81 is not output.****HINT:**

DTCs other than DTC B1622/81 and B1632/81 may be output at this time, but they are not related to this check.

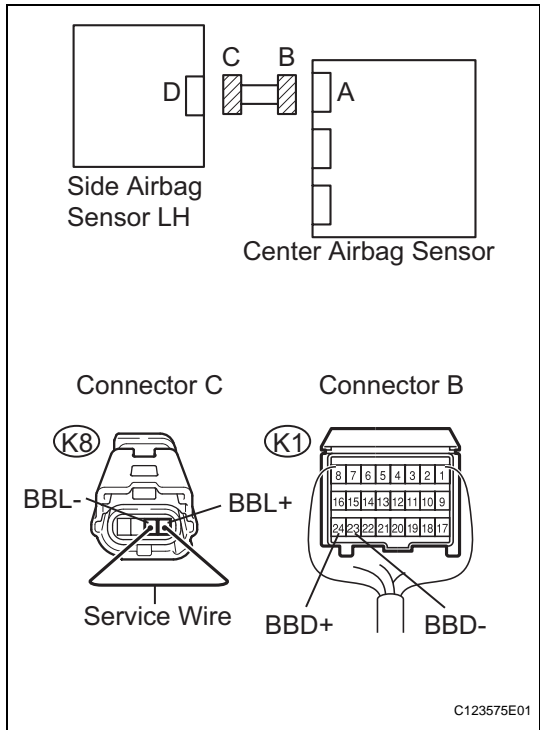
**NG****GO TO DTC OUTPUT****OK****2 CHECK CONNECTION OF CONNECTOR**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) terminal battery, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the center airbag sensor, rear airbag sensor LH and the side airbag sensor LH.

**OK:****The connectors are properly connected.****NG****CONNECT CONNECTOR****OK****RS**

3

CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the center airbag sensor and the side airbag sensor LH.
- (b) Using a service wire, connect K8-4 (BBL+) and K8-3 (BBL-) of connector C.  
**NOTICE:**  
**Do not forcibly insert the service wire into the terminals of the connector when connecting.**
- (c) Measure the resistance of the wire harness side connector.  
**Standard resistance**

Tester Connection	Specified Condition
K1-24 (BBD+) - K1-23 (BBD-)	Below 1 Ω

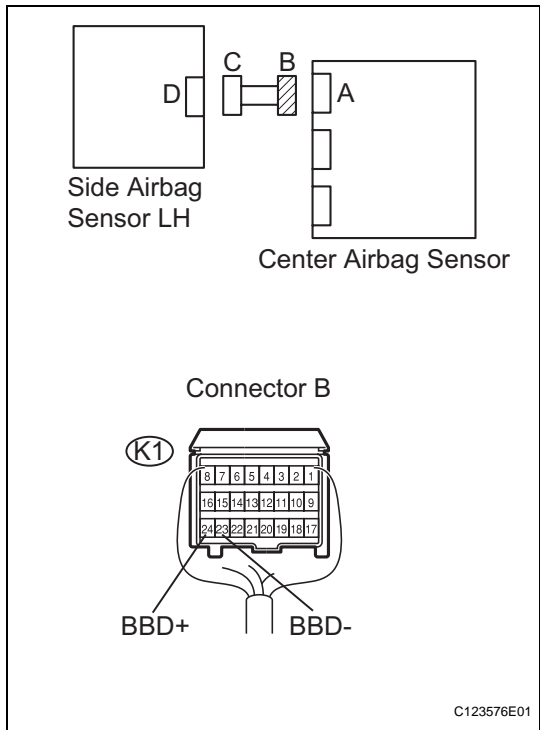
NG

REPAIR OR REPLACE FLOOR WIRE

OK

4

CHECK FLOOR WIRE (SHORT)



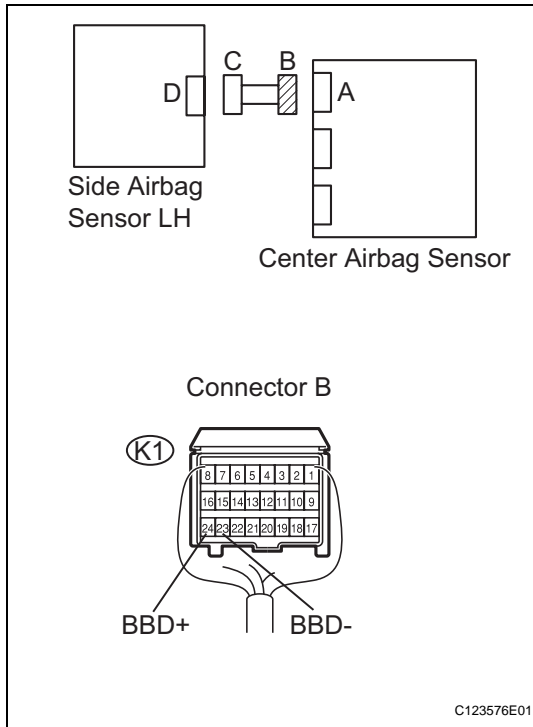
- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance of the wire harness side connector.  
**Standard resistance**

Tester Connection	Specified Condition
K1-24 (BBD+) - K1-23 (BBD-)	1 MΩ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

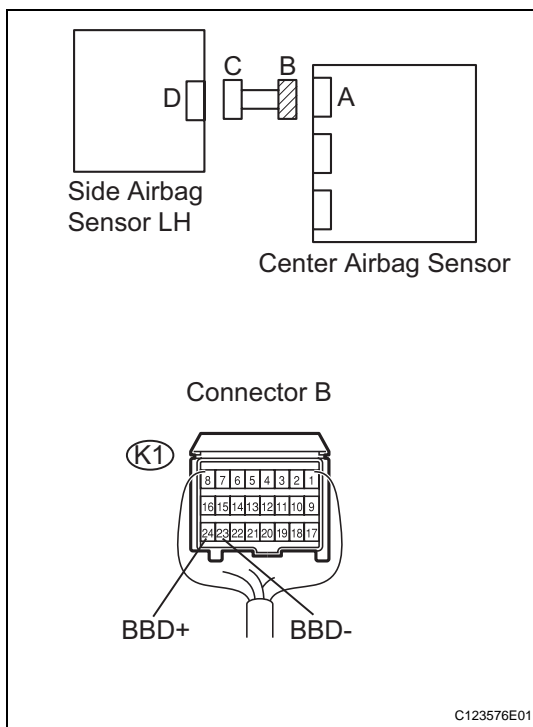
OK

**5 CHECK FLOOR WIRE (TO B+)**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
K1-24 (BBD+) - Body ground	Below 1 V
K1-23 (BBD-) - Body ground	Below 1 V

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****6 CHECK FLOOR WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

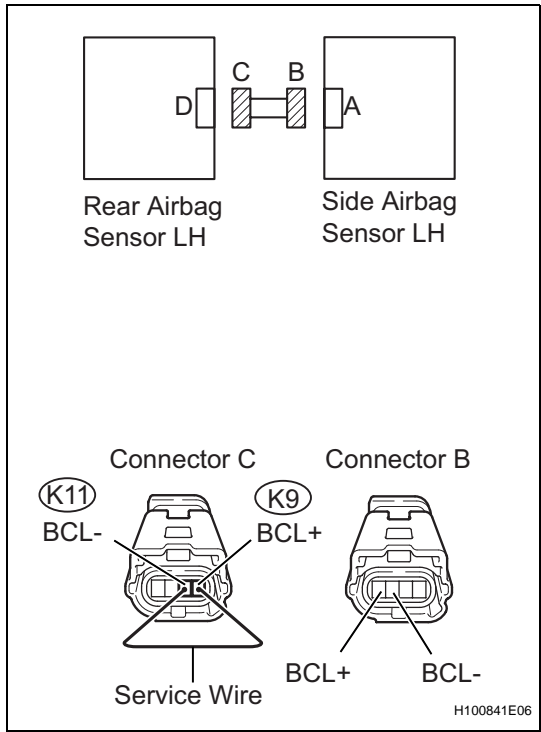
**Standard resistance**

Tester Connection	Specified Condition
K1-24 (BBD+) - Body ground	1 M $\Omega$ or higher
K1-23 (BBD-) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

7

CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the side airbag sensor LH and the rear airbag sensor LH.
- (b) Using a service wire, connect K11-1 (BCL-) and K11-2 (BCL+) of connector C.
- NOTICE:**  
**Do not forcibly insert the service wire into the terminals of the connector when connecting.**
- (c) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
K9-1 (BCL+) - K9-2 (BCL-)	Below 1 Ω

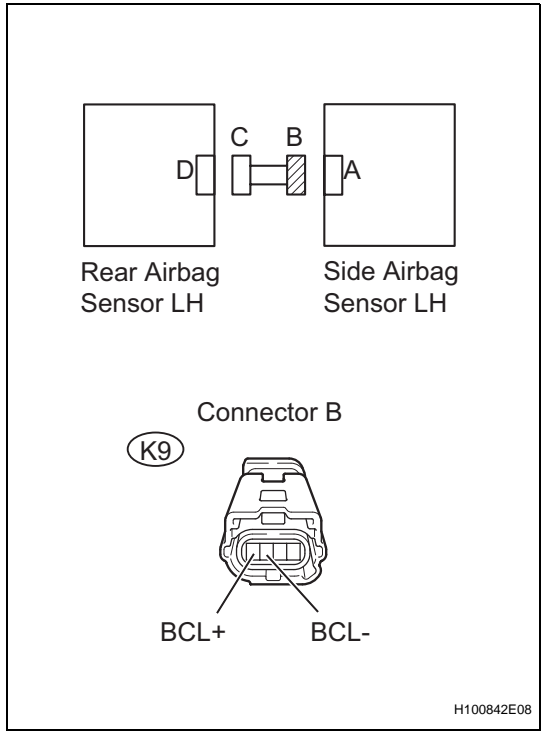
NG

REPAIR OR REPLACE FLOOR WIRE

OK

8

CHECK FLOOR WIRE (SHORT)



- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance of the wire harness side connector.

Standard resistance

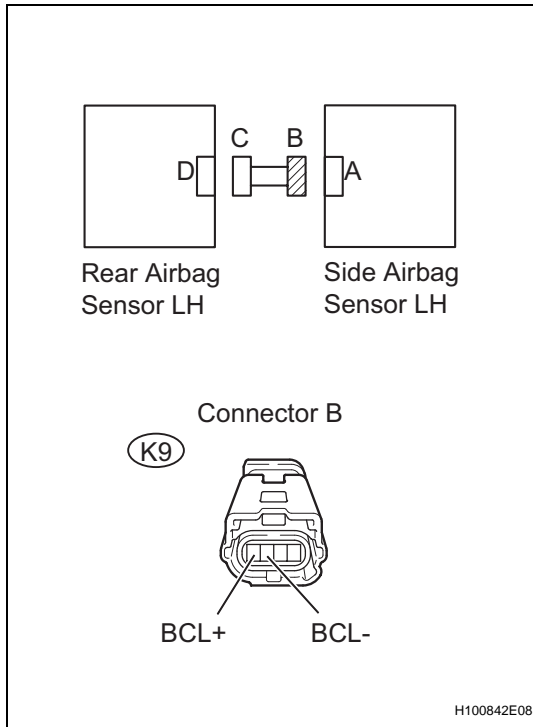
Tester Connection	Specified Condition
K9-1 (BCL+) - K9-2 (BCL-)	1 MΩ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

OK

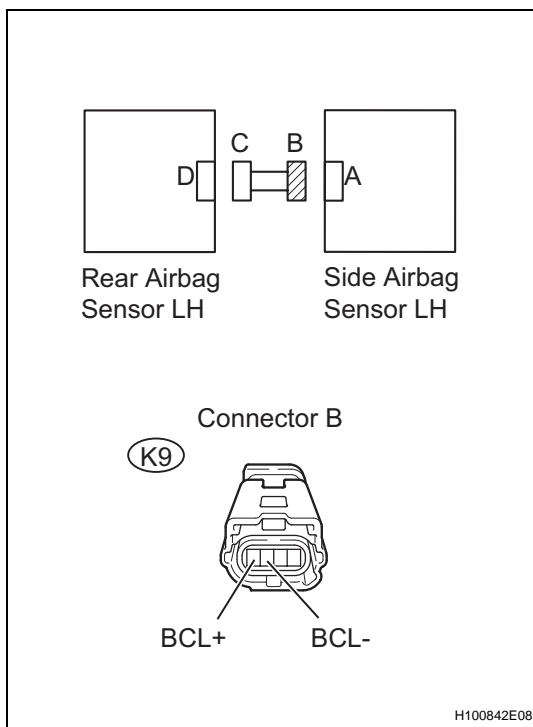
RS

**9 CHECK FLOOR WIRE (TO B+)**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
K9-1 (BCL+) - Body ground	Below 1 V
K9-2 (BCL-) - Body ground	Below 1 V

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****10 CHECK FLOOR WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

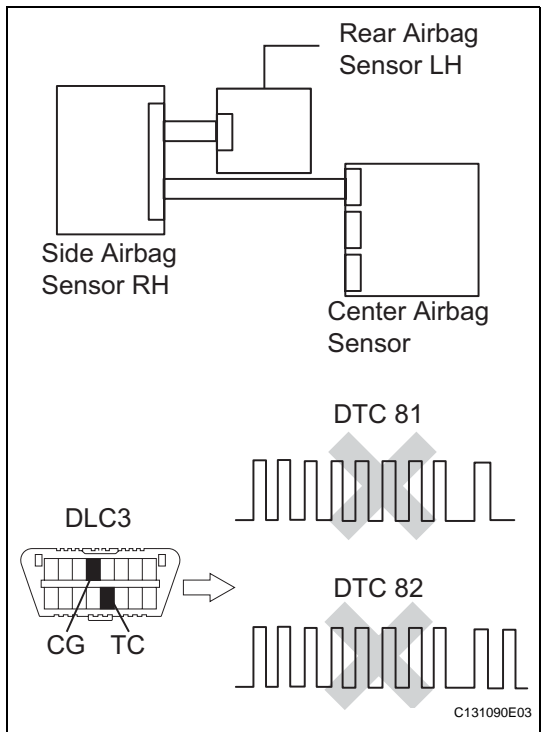
**Standard resistance**

Tester Connection	Specified Condition
K9-1 (BCL+) - Body ground	1 M $\Omega$ or higher
K9-2 (BCL-) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

11

CHECK SIDE AIRBAG SENSOR LH



- (a) Connect the connectors to the center airbag sensor .
- (b) Interchange the side airbag sensor LH with the side airbag sensor RH and connect the connectors to them.
- (c) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (d) Turn the ignition switch ON, and wait for at least 60 seconds.
- (e) Clear the DTCs (see page RS-49).
- (f) Turn the ignition switch OFF.
- (g) Turn the ignition switch ON, and wait for at least 60 seconds.
- (h) Check the DTCs (see page RS-49).

Result

Result	Proceed to
DTC B1643/81 and B1648/82 are not output	A
DTC B1643/81 is output	B
DTC B1648/82 is output	C

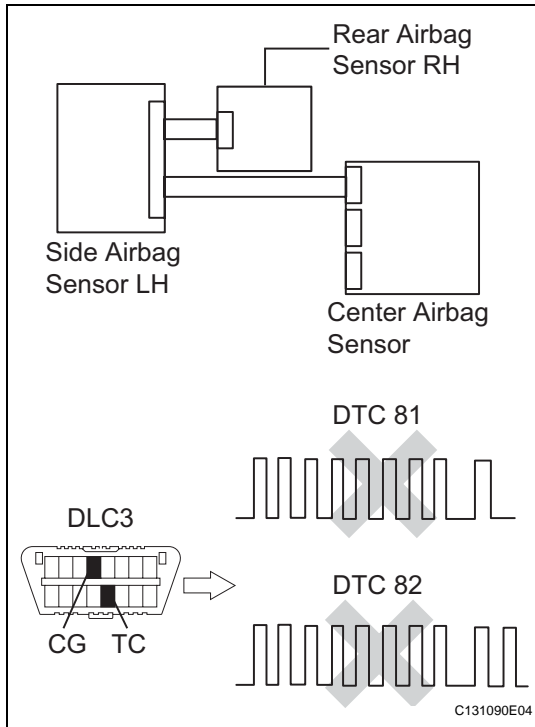
HINT:  
DTCs other than DTC B1643/81 and B1648/82 may be output at this time, but they are not related to this check.

- B

REPLACE CENTER AIRBAG SENSOR ASSEMBLY
- C

REPLACE SIDE AIRBAG SENSOR LH

A

**12 CHECK REAR AIRBAG SENSOR LH**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) terminal battery, and wait for at least 90 seconds.
- Interchange the rear airbag sensor LH with the rear airbag sensor RH and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**Result**

Result	Proceed to
DTC B1643/81 and B1648/82 are not output	A
DTC B1643/81 is output	B
DTC B1648/82 is output	C

**HINT:**

DTCs other than DTC B1643/81 and B1648/82 may be output at this time, but they are not related to this check.

**B**

**REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

**C**

**REPLACE REAR AIRBAG SENSOR LH**

**A****RS**

**USE SIMULATION METHOD TO CHECK**

DTC	B1648/82	Front Passenger Side Satellite Sensor Bus Initialization Incomplete
-----	----------	---

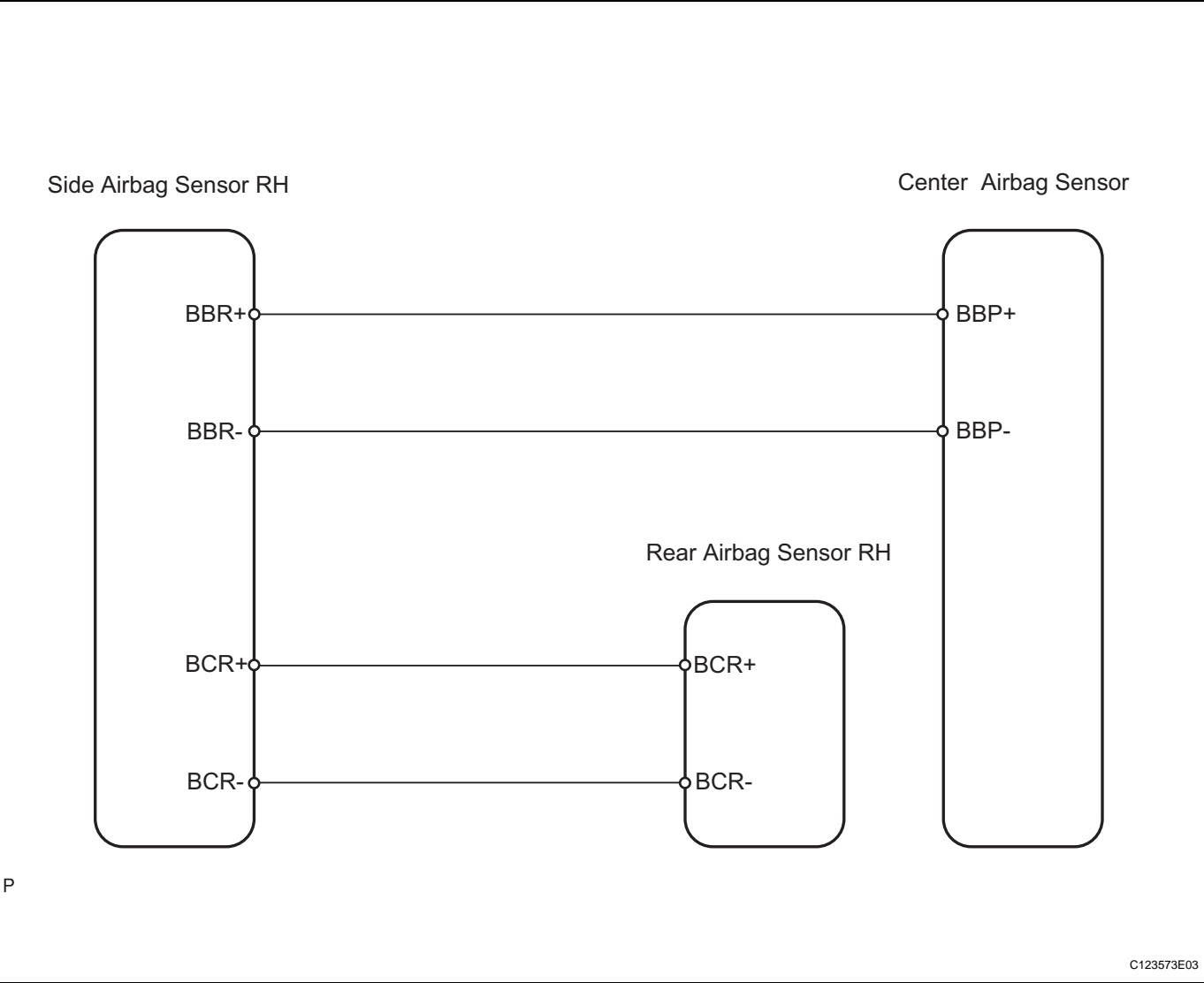
**DESCRIPTION**

When the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1648/82 is recorded when a malfunction is detected in the rear airbag sensor RH circuit.

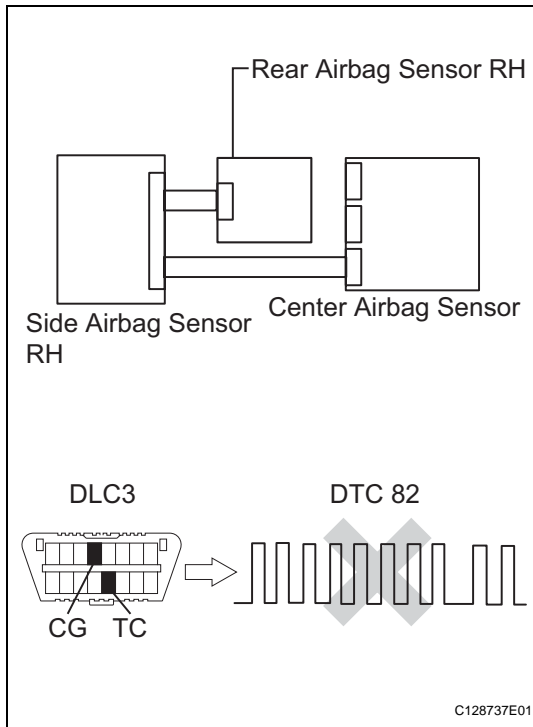
DTC No.	DTC Detection Condition	Trouble Area
B1648/82	When one of following conditions is met: <ul style="list-style-type: none"><li>Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in rear airbag sensor RH circuit for 2 seconds.</li><li>Rear airbag sensor RH malfunction</li><li>Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>Floor wire</li><li>Rear airbag sensor RH</li><li>Center airbag sensor</li></ul>

WIRING DIAGRAM





## INSPECTION PROCEDURE

**1 CHECK FOR DTC**

- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page [RS-49](#)).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page [RS-49](#)).

**OK:****DTC B1627/82 is not output.****DTC B1637/82 is not output.****HINT:**

DTCs other than DTC B1627/82 and B1637/82 may be output at this time, but they are not related to this check.

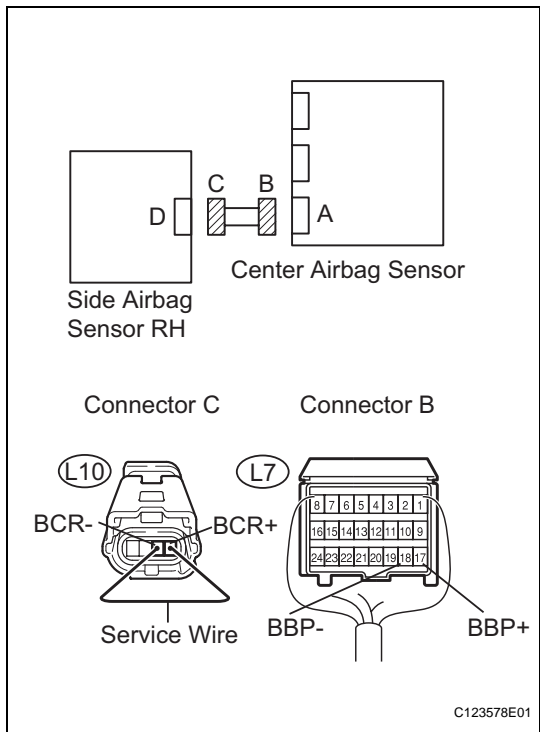
**NG****GO TO DTC OUTPUT****OK****2 CHECK CONNECTION OF CONNECTOR**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Check that the connectors are properly connected to the center airbag sensor, rear airbag sensor RH and the side airbag sensor RH.

**OK:****The connectors are properly connected.****NG****CONNECT CONNECTOR****OK****RS**

3

CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the center airbag sensor and the side airbag sensor RH.
- (b) Using a service wire, connect L10-4 (BBR+) and L10-3 (BBR-) of connector C.

**NOTICE:**  
Do not forcibly insert the service wire into the terminals of the connector when connecting.

- (c) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
L7-17 (BBP+) - L7-18 (BBP-)	Below 1 Ω

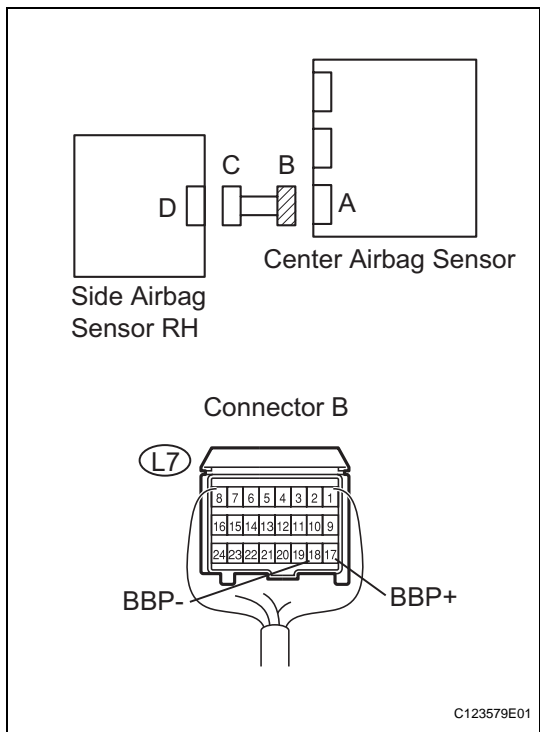
NG

REPAIR OR REPLACE FLOOR WIRE

OK

4

CHECK FLOOR WIRE (SHORT)



- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance of the wire harness side connector.

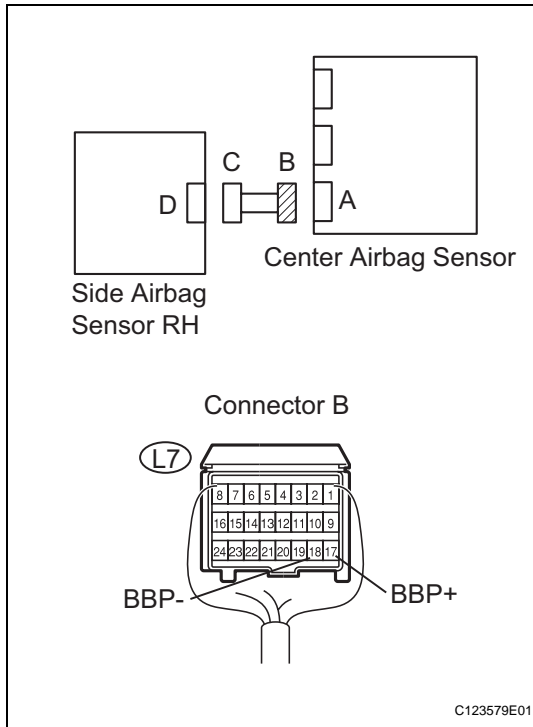
**Standard resistance**

Tester Connection	Specified Condition
L7-17 (BBP+) - L7-18 (BBP-)	1 MΩ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

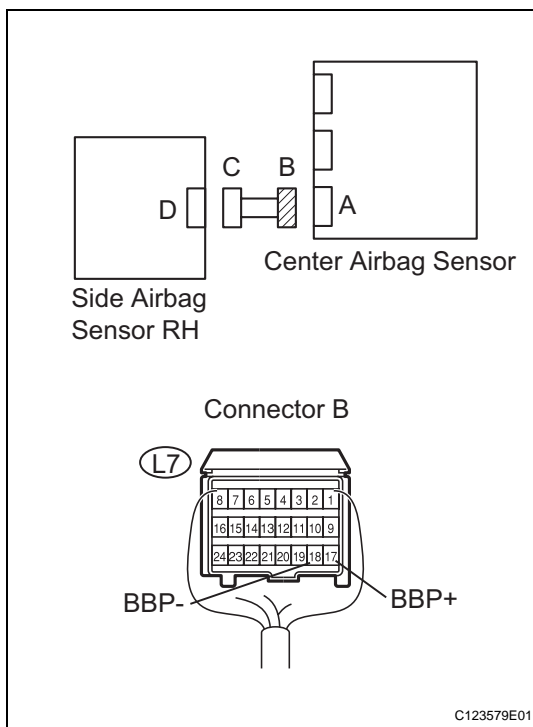
OK

**5 CHECK FLOOR WIRE (TO B+)**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
L7-17 (BBP+) - Body ground	Below 1 V
L7-18 (BBP-) - Body ground	Below 1 V

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****6 CHECK FLOOR WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

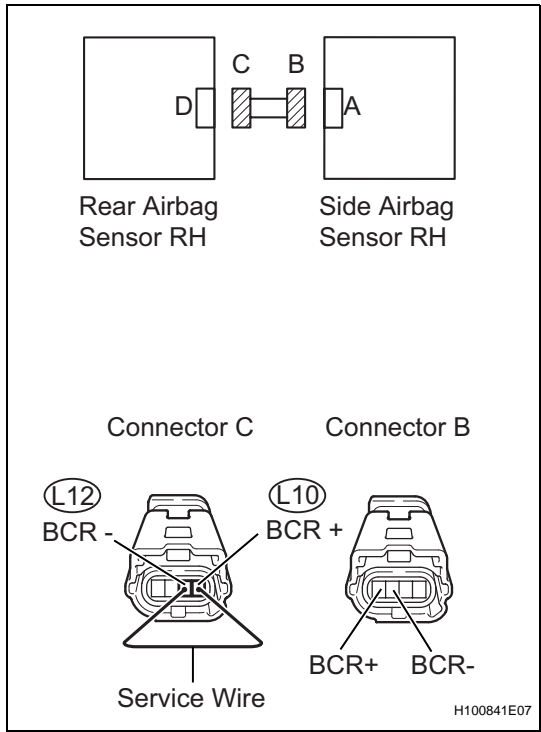
**Standard resistance**

Tester Connection	Specified Condition
L7-17 (BBP+) - Body ground	1 M $\Omega$ or higher
L7-18 (BBP-) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

7

CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the side airbag sensor RH and the rear airbag sensor RH.
- (b) Using a service wire, connect L12-1 (BCR-) and L12-2 (BCR+) of connector C.

**NOTICE:**  
**Do not forcibly insert the service wire into the terminals of the connector when connecting.**

- (c) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
L10-1 (BCR+) - L10-2 (BCR-)	Below 1 Ω

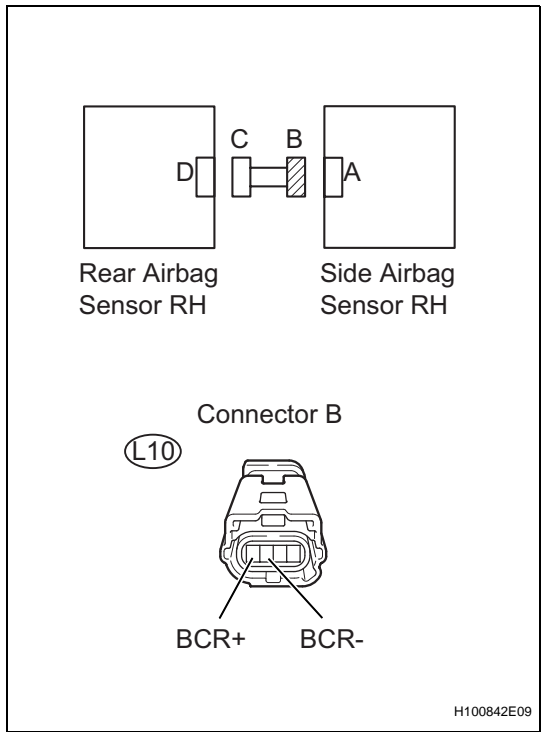
NG

REPAIR OR REPLACE FLOOR WIRE

OK

8

CHECK FLOOR WIRE (SHORT)



- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance of the wire harness side connector.

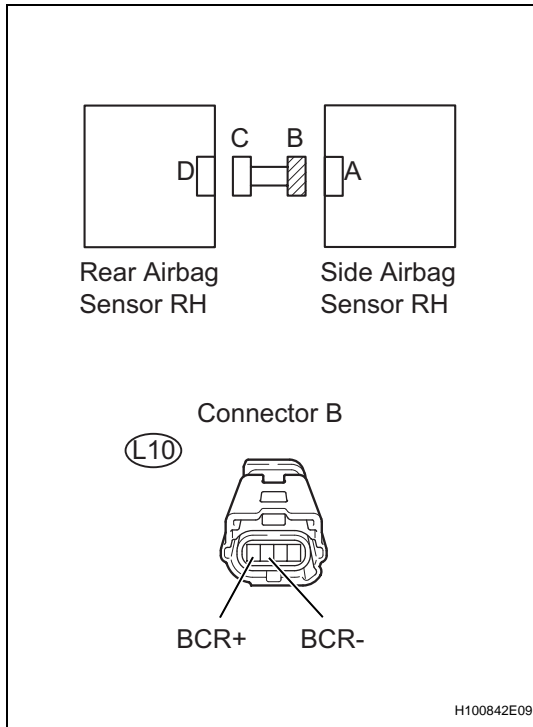
**Standard resistance**

Tester Connection	Specified Condition
L10-1 (BCR+) - L10-2 (BCR-)	1 MΩ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

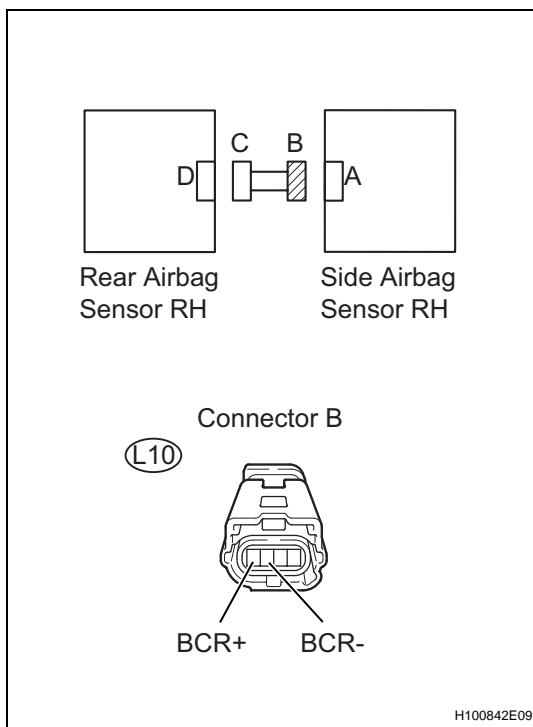
OK

**9 CHECK FLOOR WIRE (TO B+)**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
L10-1 (BCR+) - Body ground	Below 1 V
L10-2 (BCR-) - Body ground	Below 1 V

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****10 CHECK FLOOR WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

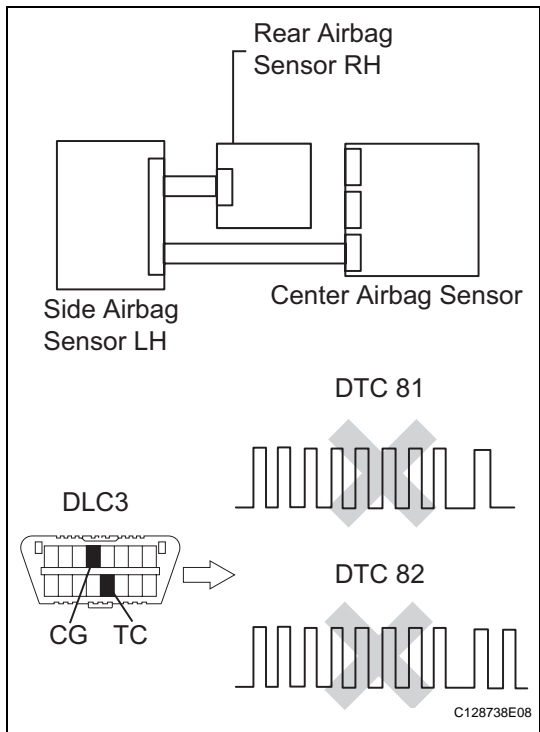
**Standard resistance**

Tester Connection	Specified Condition
L10-1 (BCR+) - Body ground	1 M $\Omega$ or higher
L10-2 (BCR-) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

11

CHECK SIDE AIRBAG SENSOR RH



- (a) Connect the connectors to the center airbag sensor.
- (b) Interchange the side airbag sensor RH with the side airbag sensor LH and connect the connectors to them.
- (c) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (d) Turn the ignition switch ON, and wait for at least 60 seconds.
- (e) Clear the DTCs (see page RS-49).
- (f) Turn the ignition switch OFF.
- (g) Turn the ignition switch ON, and wait for at least 60 seconds.
- (h) Check for DTCs (see page RS-49).

Result

Result	Proceed to
DTC B1643/81 and B1648/82 are not output	A
DTC B1648/82 is output	B
DTC B1643/81 is output	C

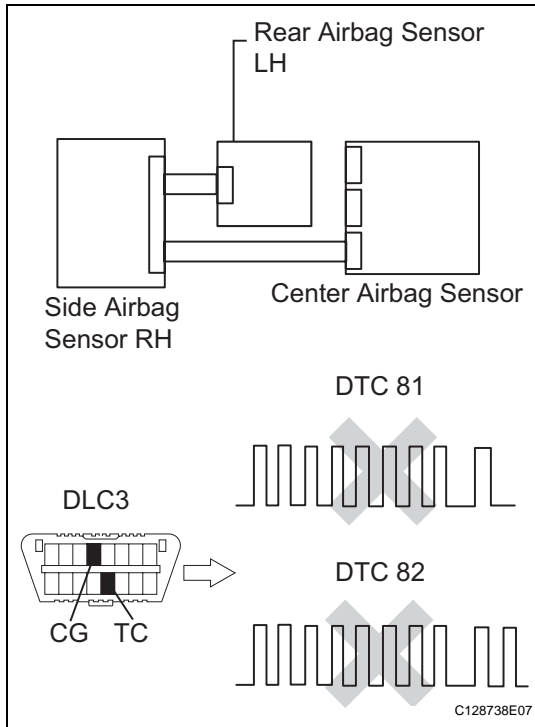
HINT:  
DTCs other than DTC B1643/81 or B1648/82 may be output at this time, but they are not related to this check.

- B

REPLACE CENTER AIRBAG SENSOR ASSEMBLY
- C

REPLACE SIDE AIRBAG SENSOR RH

A

**12 CHECK REAR AIRBAG SENSOR RH**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Interchange the rear airbag sensor LH with the rear airbag sensor RH and connect the connectors to them.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page [RS-49](#)).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page [RS-49](#)).

**Result**

Result	Proceed to
DTC B1643/81 and B1648/82 are not output	A
DTC B1648/82 is output	B
DTC B1643/81 is output	C

**B****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****C****REPLACE REAR AIRBAG SENSOR RH****A****USE SIMULATION METHOD TO CHECK****RS**

DTC	B1650/32	Occupant Classification System Malfunction
-----	----------	--

DESCRIPTION

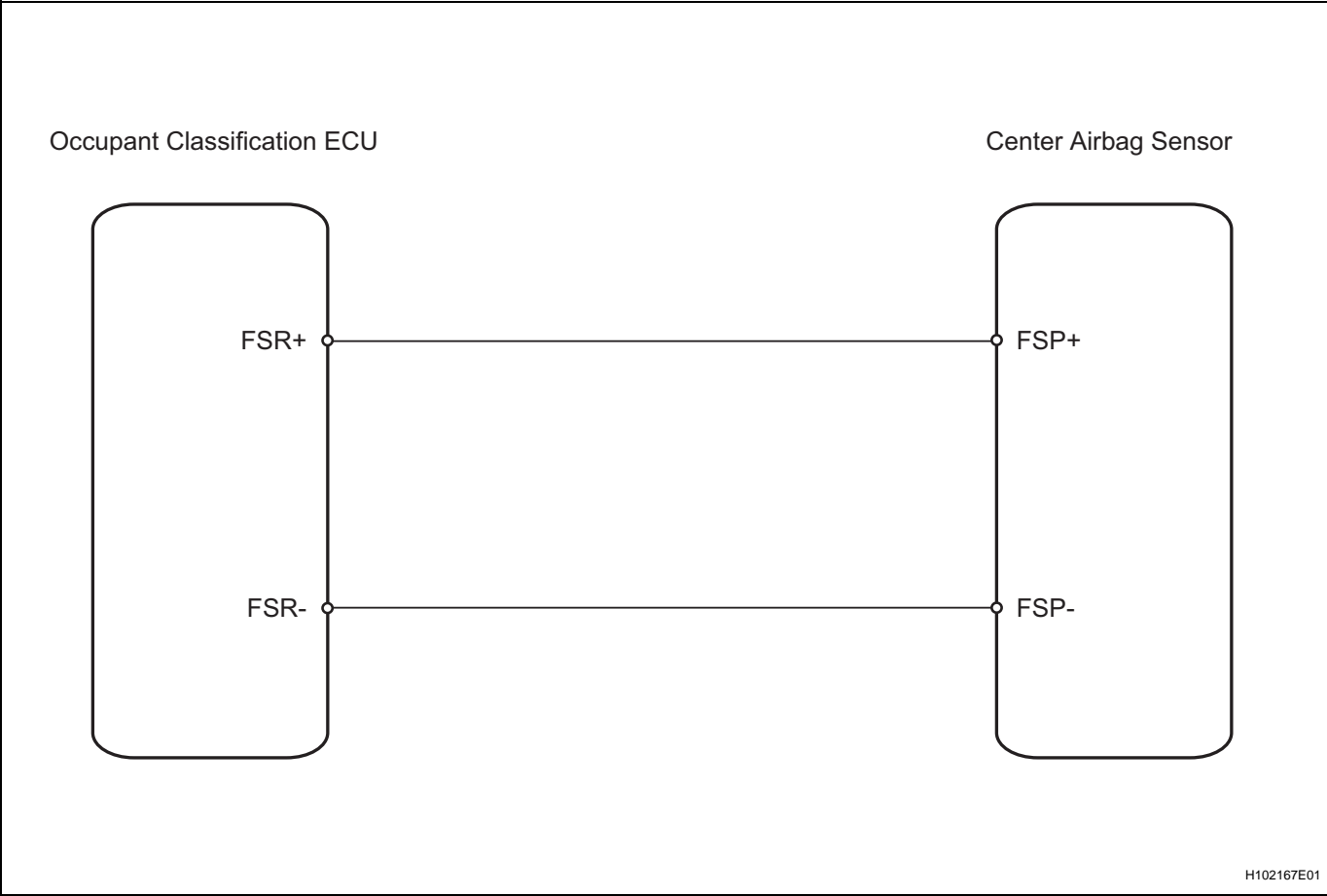
The occupant classification system circuit consists of the center airbag sensor and the occupant classification system.

When the center airbag sensor receives signals from the occupant classification ECU, it determines whether or not the front passenger airbag, front seat side airbag RH and seat belt pretensioner RH should be operated.

DTC B1650/32 is set when a malfunction is detected in the occupant classification system circuit.

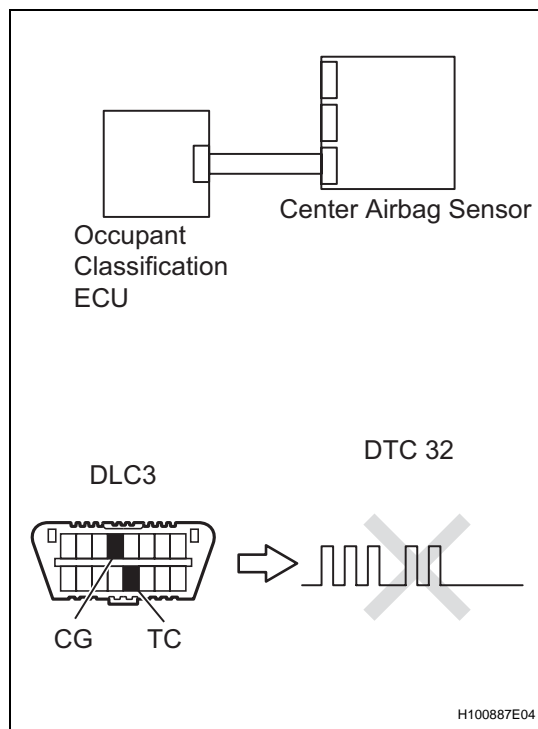
DTC No.	DTC Detection Condition	Trouble Area
B1650/32	When one of following conditions is met: <ul style="list-style-type: none"><li>• Occupant classification system malfunction</li><li>• Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in occupant classification system circuit for 2 seconds</li><li>• Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>• Floor wire</li><li>• Occupant classification system</li><li>• Center airbag sensor</li></ul>

WIRING DIAGRAM





## INSPECTION PROCEDURE

**1 CHECK FOR DTC (CENTER AIRBAG SENSOR)**

- (a) Turn the ignition switch ON, and wait for at least 60 seconds.
- (b) Clear the DTCs (see page [RS-49](#)).
- (c) Turn the ignition switch OFF.
- (d) Turn the ignition switch ON, and wait for at least 60 seconds.
- (e) Check for DTCs (see page [RS-49](#)).

**OK:****DTC B1650/32 is not output.****HINT:**

DTCs other than B1650/32 may be output at this time, but they are not related to this check.

**OK****USE SIMULATION METHOD TO CHECK****NG****2 CHECK FOR DTC (OCCUPANT CLASSIFICATION ECU)**

- (a) Turn the ignition switch ON, and wait for at least 10 seconds.
- (b) Using the intelligent tester (with CAN VIM), check for DTCs of the occupant classification ECU (see page [RS-249](#)).

**OK:****DTC is not output.****NG****GO TO DTC CHART****OK****3 CHECK CONNECTION OF CONNECTOR**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the center airbag sensor and the occupant classification ECU.

**OK:****The connectors are properly connected.****RS**

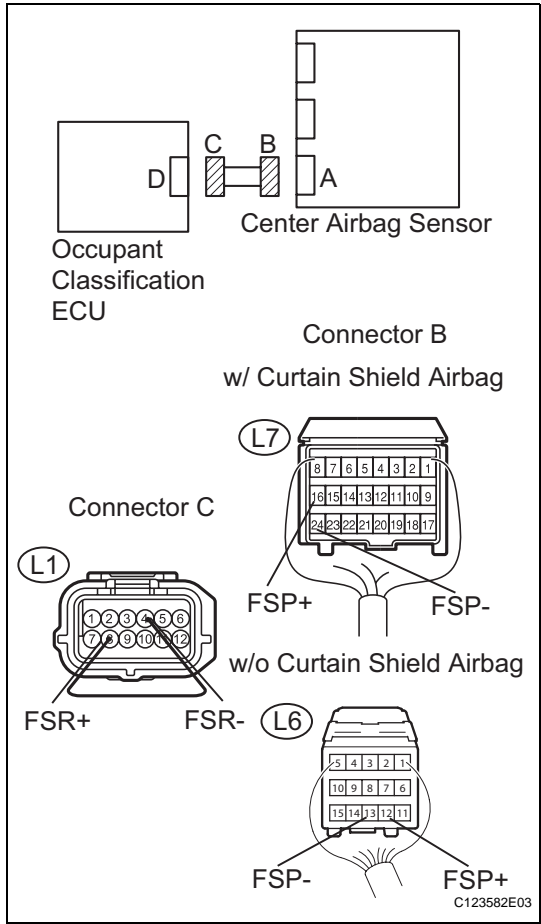
NG

CONNECT CONNECTOR

OK

4

CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the center airbag sensor and occupant classification ECU.
- (b) Using a service wire, connect L1-8 (FSR+) and L1-4 (FSR-) of connector C.
- (c) Measure the resistance of the wire harness side connector.

**NOTICE:**  
Do not forcibly insert the service wire into the terminals of the connector when connecting.

**Standard resistance:**  
w/ Curtain shield airbag

Tester Connection	Specified Condition
L7-16 (FSP+) - L7-24 (FSP-)	Below 1 Ω

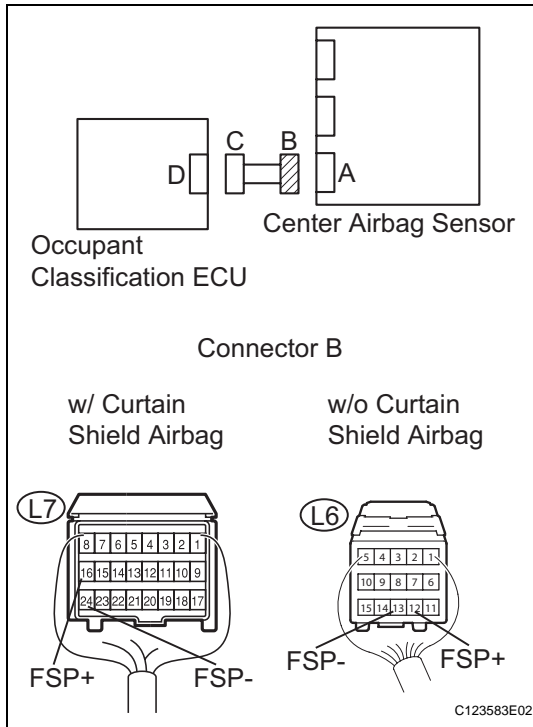
w/o Curtain shield airbag

Tester Connection	Specified Condition
L6-12 (FSP+) - L6-13 (FSP-)	Below 1 Ω

NG

REPAIR OR REPLACE FLOOR WIRE

OK

**5 CHECK FLOOR WIRE (SHORT)**

- Disconnect the service wire from connector C.
- Measure the resistance of the wire harness side connector.

**Standard resistance:**  
**w/ Curtain shield airbag**

Tester Connection	Specified Condition
L7-16 (FSP+) - L7-24 (FSP-)	1 MΩ or higher

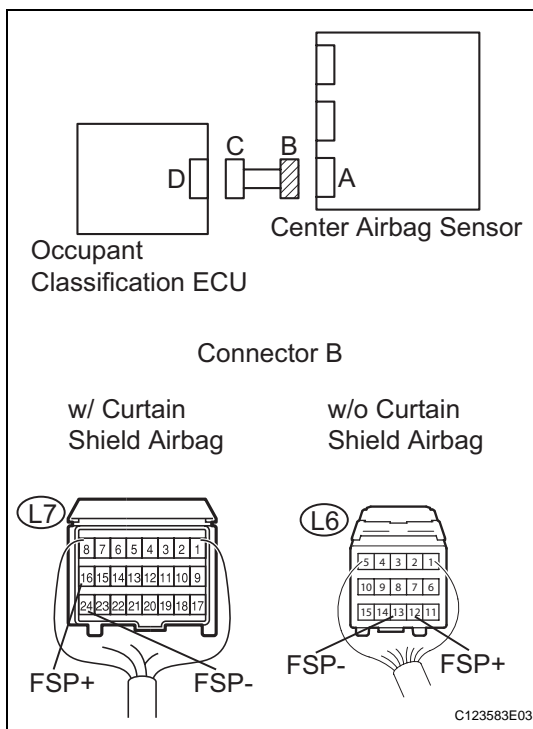
**w/o Curtain shield airbag**

Tester Connection	Specified Condition
L6-12 (FSP+) - L6-13 (FSP-)	1 MΩ or higher

**NG**

**REPAIR OR REPLACE FLOOR WIRE**

**OK**

**6 CHECK FLOOR WIRE (TO B+)**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage:**  
**w/ Curtain shield airbag**

Tester Connection	Specified Condition
L7-16 (FSP+) - Body ground	Below 1 V
L7-24 (FSP-) - Body ground	Below 1 V

**w/o Curtain shield airbag**

Tester Connection	Specified Condition
L6-12 (FSP+) - Body ground	Below 1 V
L6-13 (FSP-) - Body ground	Below 1 V

**NG**

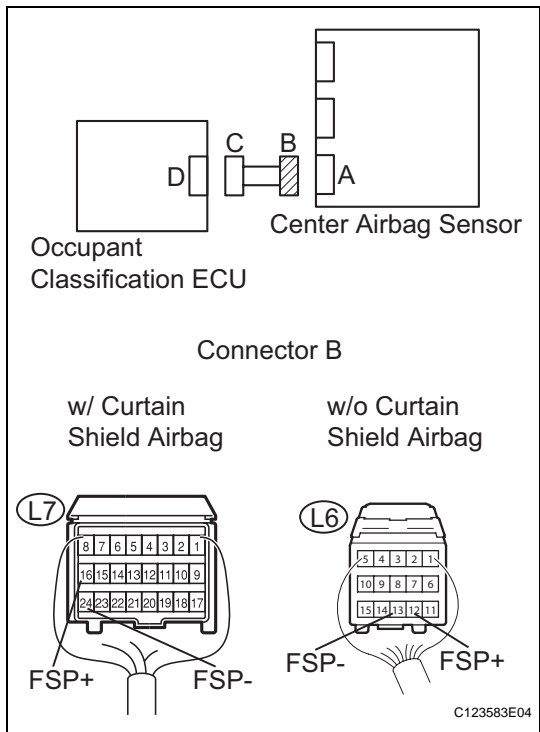
**REPAIR OR REPLACE FLOOR WIRE**

**OK**

**RS**

7

CHECK FLOOR WIRE (TO GROUND)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Measure the resistance of the wire harness side connector.

Standard resistance:  
w/ Curtain shield airbag

Tester Connection	Specified Condition
L7-16 (FSP+) - Body ground	1 MΩ or higher
L7-24 (FSP-) - Body ground	1 MΩ or higher

w/o Curtain shield airbag

Tester Connection	Specified Condition
L6-12 (FSP+) - Body ground	1 MΩ or higher
L6-13 (FSP-) - Body ground	1 MΩ or higher

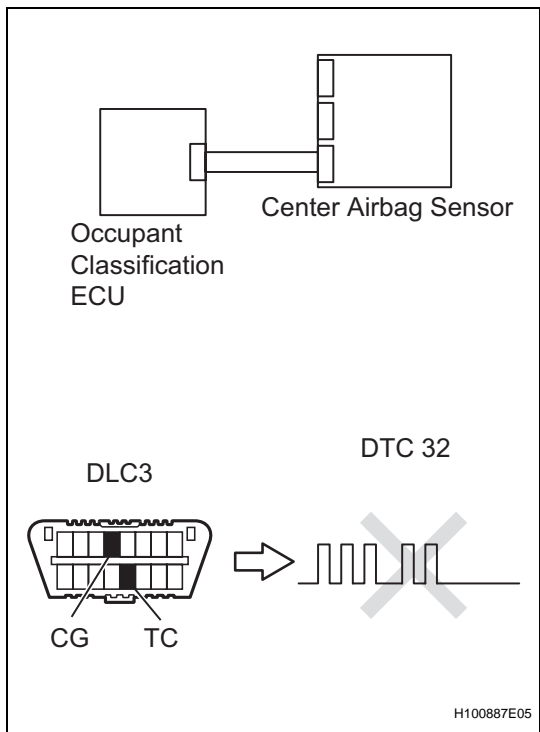
NG

REPAIR OR REPLACE FLOOR WIRE

OK

8

CHECK CENTER AIRBAG SENSOR ASSEMBLY



- (a) Replace the center airbag sensor (see page RS-374).  
HINT:  
Perform the inspection using parts from a normal vehicle when possible.
- (b) Connect the connectors to the center airbag sensor.
- (c) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (d) Turn the ignition switch ON, and wait for at least 60 seconds.
- (e) Clear the DTCs (see page RS-49).
- (f) Turn the ignition switch OFF.
- (g) Turn the ignition switch ON, and wait for at least 60 seconds.
- (h) Check for DTCs (see page RS-49).

OK:  
DTC B1650/32 is not output.

HINT:  
DTCs other than B1650/32 may be output at this time, but they are not related to this check.

OK

USE SIMULATION METHOD TO CHECK

NG

**9 REPLACE OCCUPANT CLASSIFICATION ECU**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Replace the occupant classification ECU (see page [RS-392](#)).

**NEXT****10 PERFORM ZERO POINT CALIBRATION**

- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Using the intelligent tester, perform the zero point calibration (see page [RS-241](#)).

**OK:****COMPLETED is displayed on the tester.****NEXT****11 PERFORM SENSITIVITY CHECK**

- (a) Using the intelligent tester, perform the sensitivity check (see page [RS-241](#)).

**Standard value:****27 to 33 kg (59.52 to 72.75 lb)****NEXT****END****RS**

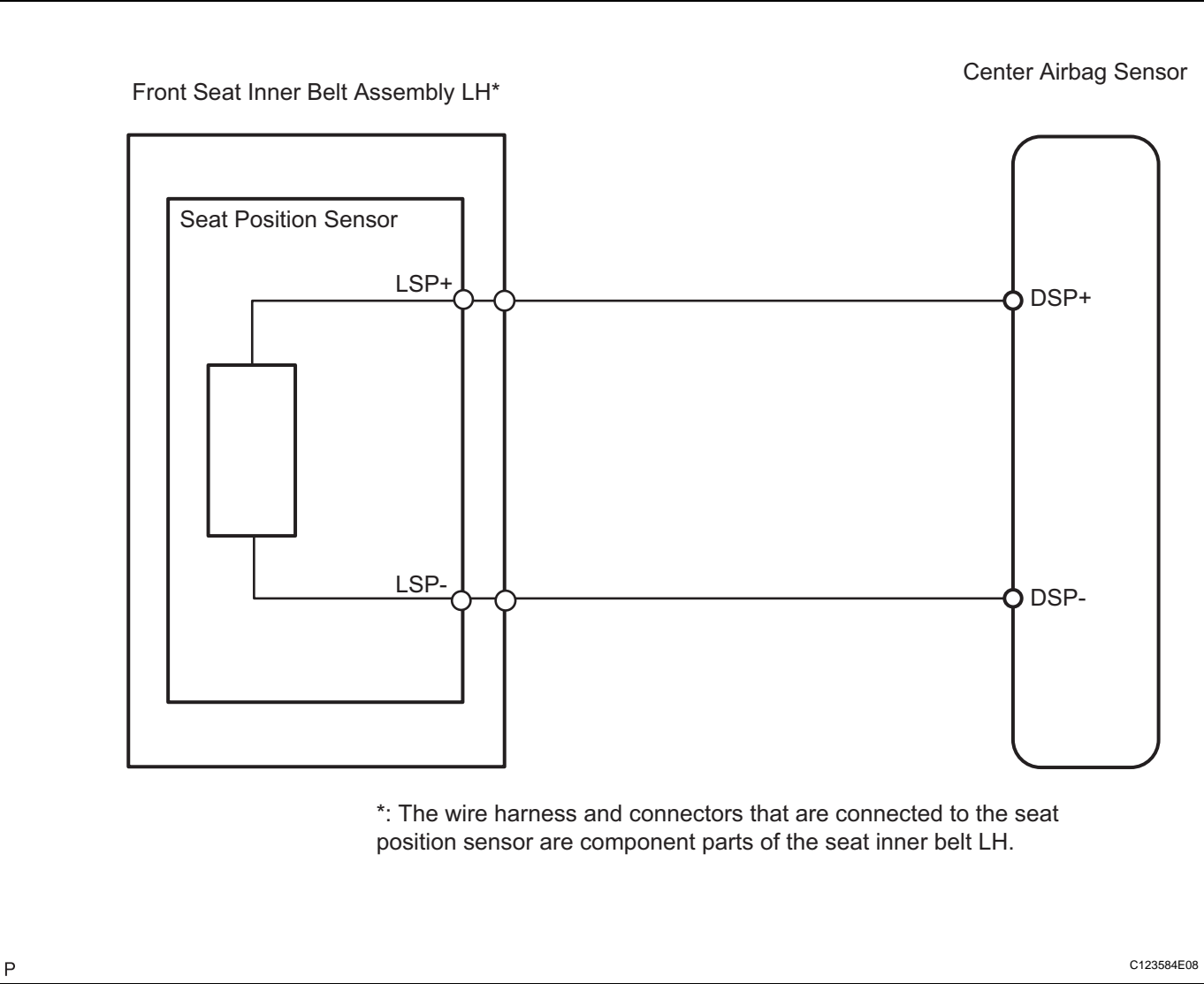
DTC	B1653/35	Seat Position Airbag Sensor Circuit Malfunction
-----	----------	---

DESCRIPTION

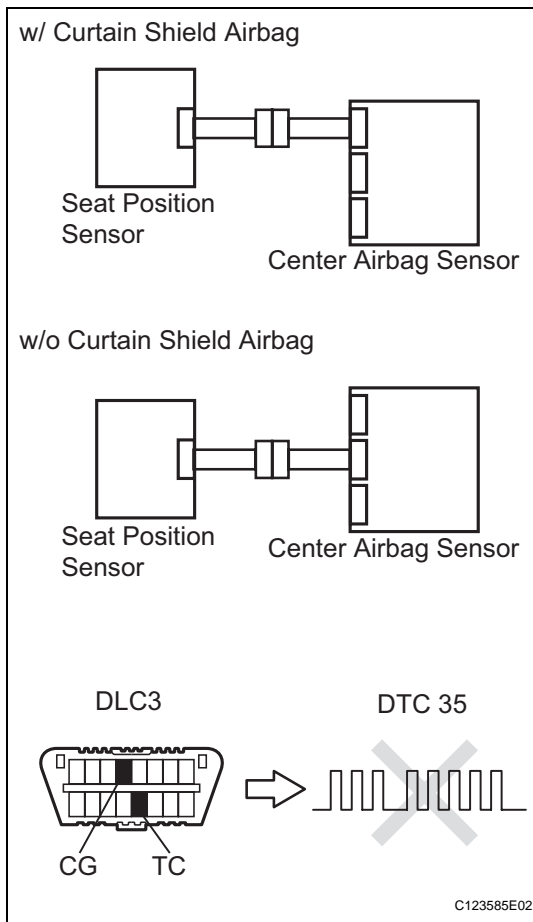
The seat position sensor circuit consists of the center airbag sensor and the seat position sensor. DTC B1653/35 is recorded when a malfunction is detected in the seat position sensor circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1653/35	When one of following conditions is met: <ul style="list-style-type: none"><li>Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in seat position sensor circuit for 2 seconds.</li><li>Seat position sensor malfunction</li><li>Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>Floor wire</li><li>Front seat inner belt LH</li><li>Seat position sensor</li><li>Center airbag sensor</li></ul>

WIRING DIAGRAM



## INSPECTION PROCEDURE

**1 CHECK FOR DTC**

- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page [RS-49](#)).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page [RS-49](#)).

**OK:****DTC B1653/35 is not output.****HINT:**

DTCs other than DTC B1653/35 may be output at this time, but they are not related to this check.

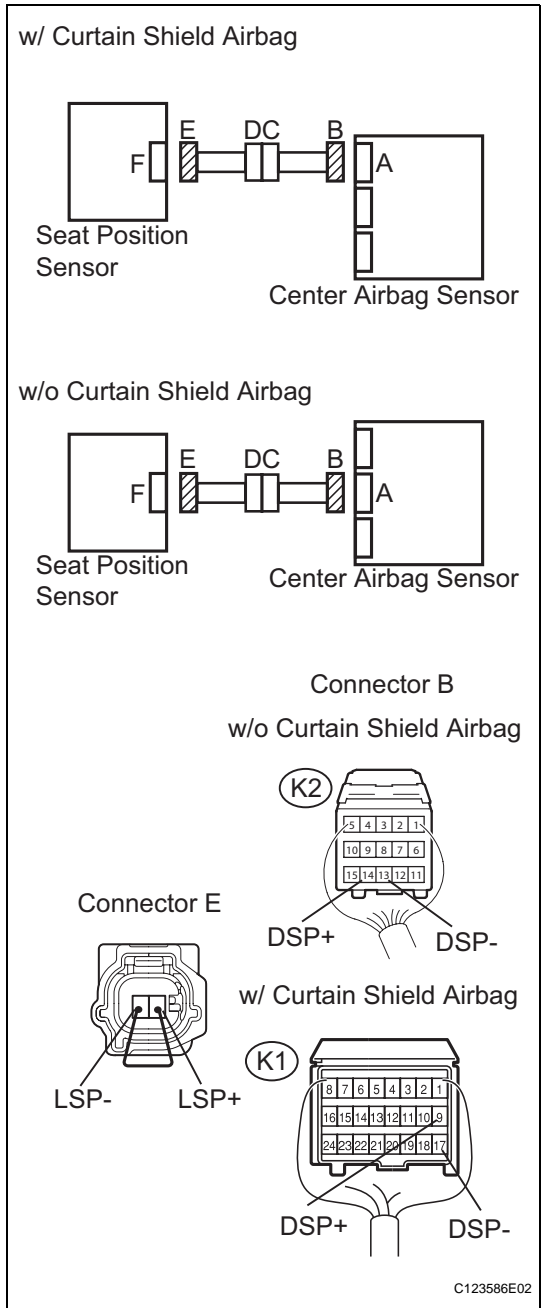
**OK****USE SIMULATION METHOD TO CHECK****NG****RS****2 CHECK CONNECTION OF CONNECTOR**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Check that the connectors are properly connected to the center airbag sensor and the seat position sensor.

**OK:****The connectors are properly connected.****NG****CONNECT CONNECTOR****OK**

3

CHECK SEAT POSITION SENSOR CIRCUIT (OPEN)



- (a) Disconnect the connectors from the center airbag sensor and the seat position sensor.
- (b) Using a service wire, connect 2 and 1 of connector E.
- NOTICE:**  
Do not forcibly insert the service wire into the terminals of the connector when connecting.
- (c) Measure the resistance of the wire harness side connector.
- Standard resistance:**  
w/o Curtain shield airbag

Tester Connection	Specified Condition
K2-14 (DSP+) - K2-13 (DSP-)	Below 1 Ω

w/ Curtain shield airbag

Tester Connection	Specified Condition
K1-9 (DSP+) - K1-17 (LSP-)	Below 1 Ω

NG

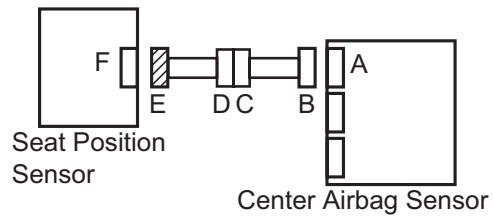
Go to step 10

OK

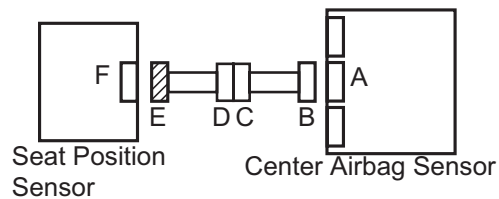


**4****CHECK SEAT POSITION SENSOR CIRCUIT (SHORT)**

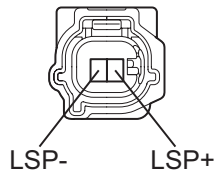
w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



Connector E



C123587E03

- (a) Disconnect the service wire from connector E.
- (b) Measure the resistance of the wire harness side connector.

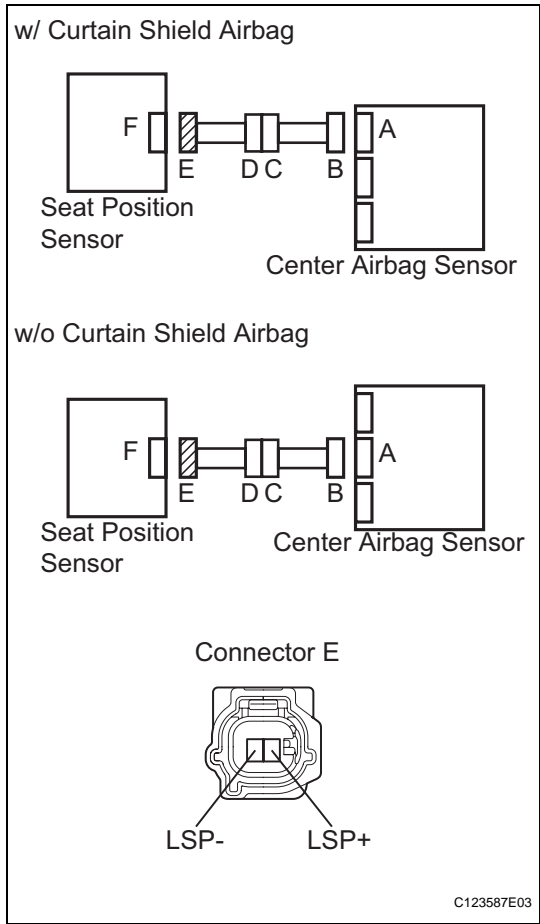
**Standard resistance**

Tester Connection	Specified Condition
2 (LSP+) - 1 (LSP-)	1 MΩ or higher

**NG****Go to step 11****OK****RS**

5

CHECK SEAT POSITION SENSOR CIRCUIT (TO B+)



- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
2 (LSP+) - Body ground	Below 1 V
1 (LSP-) - Body ground	Below 1 V

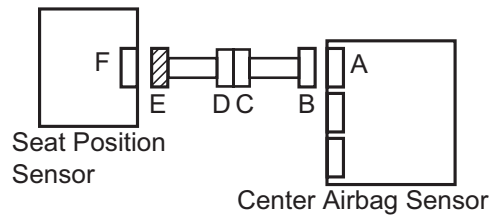
NG

Go to step 12

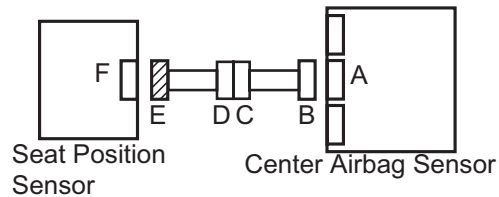
## 6

## CHECK SEAT POSITION SENSOR CIRCUIT (TO GROUND)

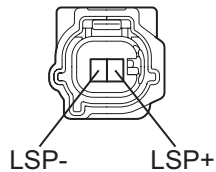
w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



Connector E



C123587E03

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Measure the voltage of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
2 (LSP+) - Body ground	1 M $\Omega$ or higher
1 (LSP-) - Body ground	1 M $\Omega$ or higher

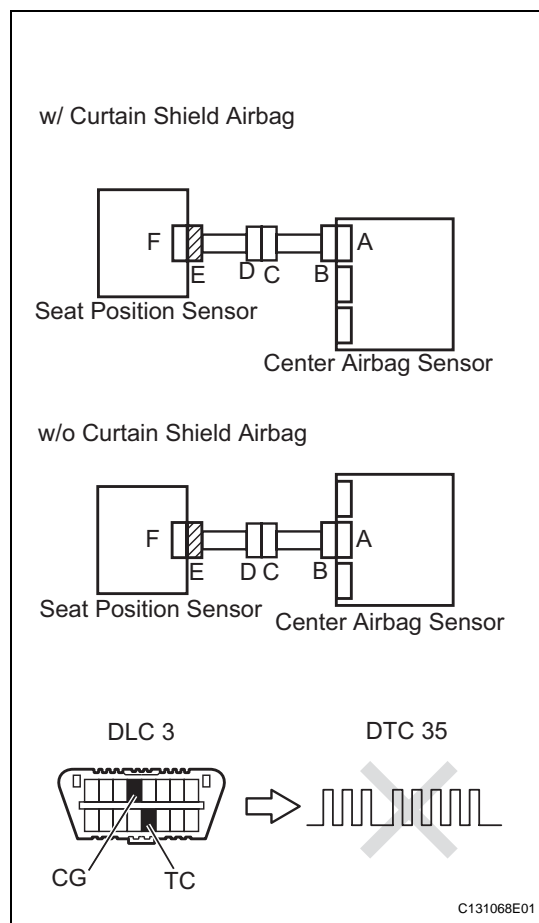
NG

Go to step 13

OK

RS

## 7 CHECK SEAT POSITION SENSOR



- Connect the connectors to the center airbag sensor and the seat position sensor.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**OK:**

**DTC B1653/35 is not output.**

**HINT:**

DTCs other than DTC B1653/35 may be output at this time, but they are not related to this check.

**OK**

**USE SIMULATION METHOD TO CHECK**

**NG**

**RS**

## 8 REPLACE SEAT POSITION SENSOR

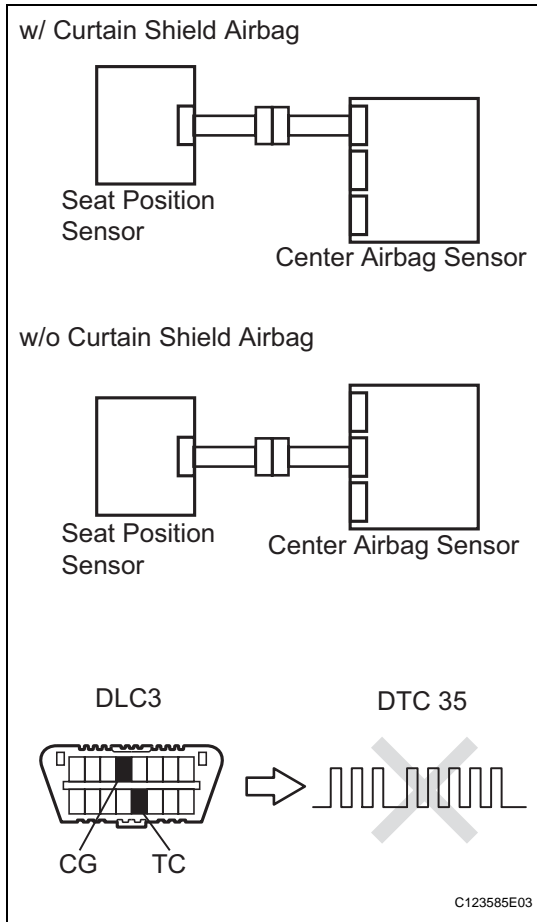
- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Replace the seat position sensor (see page RS-389).

**HINT:**

Perform the inspection using parts from a normal vehicle if possible.

**NEXT**

## 9 CHECK CENTER AIRBAG SENSOR ASSEMBLY



- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**OK:**

**DTC B1653/35 is not output.**

**HINT:**

DTCs other than DTC B1653/35 may be output at this time, but they are not related to this check.

**NG**

**REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

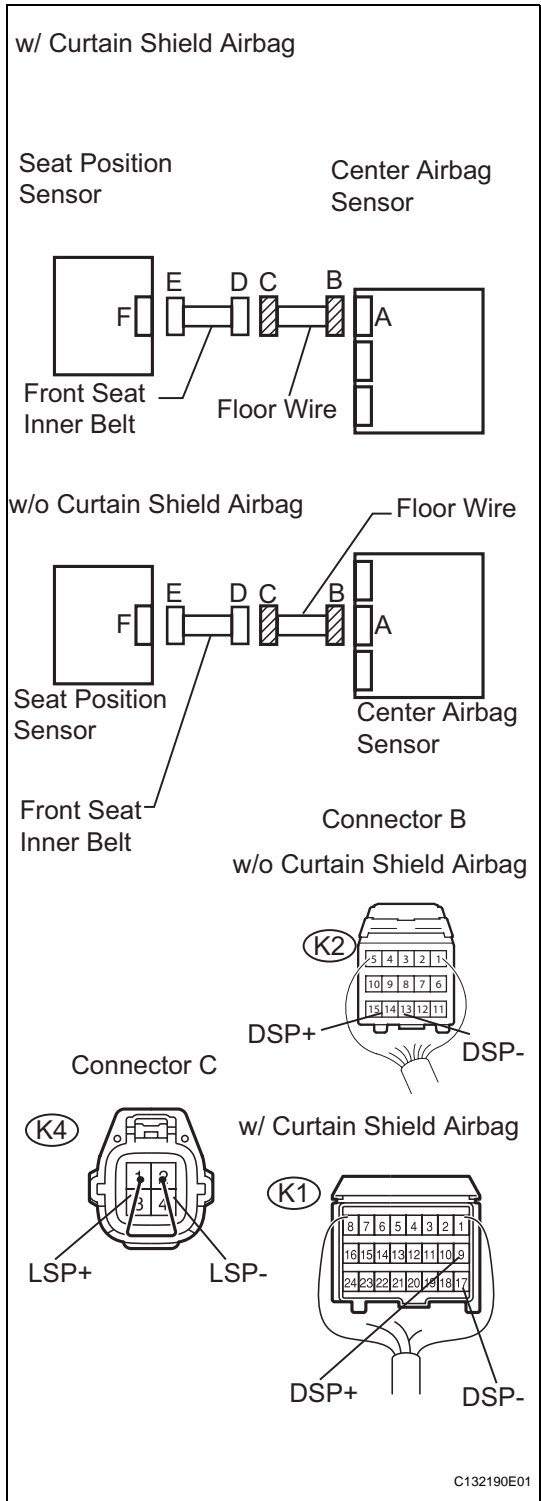
**OK**

**RS**

**END**

10

CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the front seat inner belt connector from the flow wire.
- (b) Using a service wire, connect K4-1 (LSP+) and K4-2 (LSP-) of connector C.
- (c) Measure the resistance of the wire harness side connectors.

**NOTICE:**  
Do not forcibly insert the service wire into the terminals of the connector when connecting.

**Standard resistance:**  
w/o Curtain shield airbag

Tester Connection	Specified Condition
K2-14 (DSP+) - K2-13 (DSP-)	Below 1 Ω

w/ Curtain shield airbag

Tester Connection	Specified Condition
K1-9 (DSP+) - K1-17 (DSP-)	Below 1 Ω

NG

REPAIR OR REPLACE FLOOR WIRE

OK

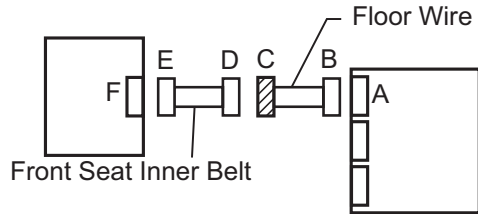
REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

**11 CHECK FLOOR WIRE (SHORT)**

w/o Curtain Shield Airbag

Seat Position  
Sensor

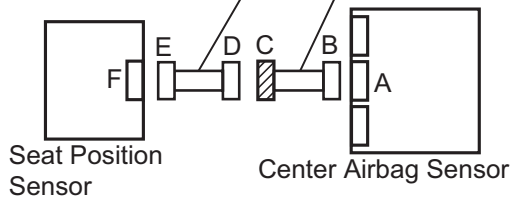
Center Airbag Sensor



w/ Curtain Shield Airbag

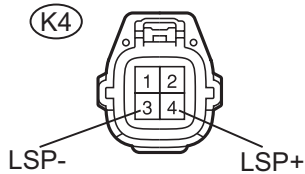
Front Seat Inner Belt

Floor Wire

Seat Position  
Sensor

Center Airbag Sensor

Connector C



C132197E01

- (a) Disconnect the front seat inner belt connector from the floor wire.
- (b) Measure the resistance of the wire harness side connector.

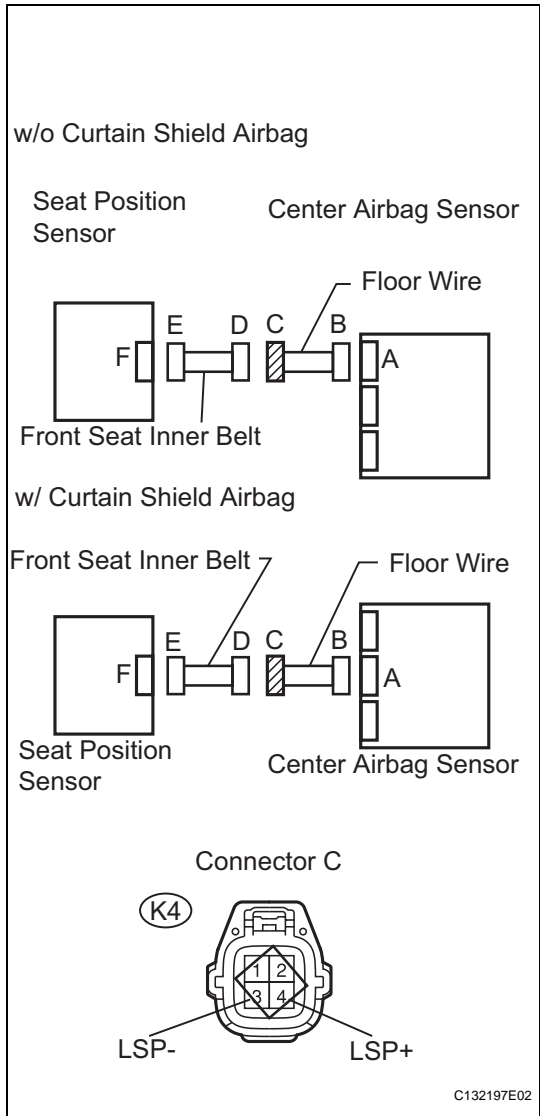
**Standard resistance**

Tester Connection	Specified Condition
K4-2 (LSP+) - K4-1 (LSP-)	1 MΩ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS****REPLACE FRONT SEAT INNER BELT ASSEMBLY LH**

12

CHECK FLOOR WIRE (TO B+)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the front seat inner belt connector from the floor wire.
- (d) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (e) Turn the ignition switch ON.
- (f) Measure the voltage of the wire harness side connectors.

Standard voltage

Tester Connection	Specified Condition
K4-2 (LSP+) - Body ground	Below 1 V
K4-1 (LSP-) - Body ground	Below 1 V

NG

REPAIR OR REPLACE FLOOR WIRE

OK

REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

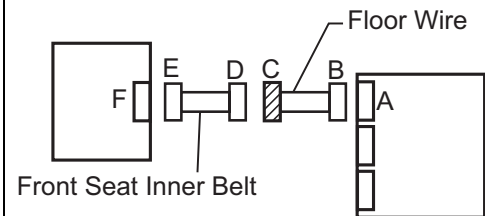


**13 CHECK FLOOR WIRE (TO GROUND)**

w/ Curtain Shield Airbag

Seat Position Sensor

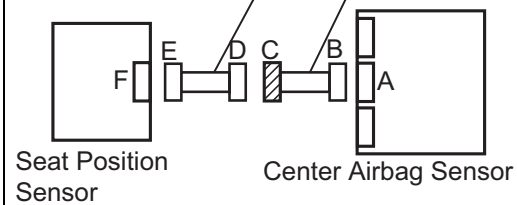
Center Airbag Sensor



w/o Curtain Shield Airbag

Front Seat Inner Belt

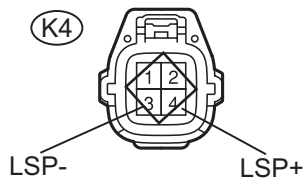
Floor Wire



Seat Position Sensor

Center Airbag Sensor

Connector C



C132197E03

- (a) Disconnect the front seat inner belt connector from the floor wire.
- (b) Measure the resistance of the wire harness side connectors.

**Standard resistance**

Tester Connection	Specified Condition
K4-2 (LSP+) - Body ground	1 M $\Omega$ or higher
K4-1 (LSP-) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****REPLACE FRONT SEAT INNER BELT ASSEMBLY LH****RS**

DTC	B1655/37	Driver Side Seat Belt Buckle Switch Circuit Malfunction
-----	----------	---

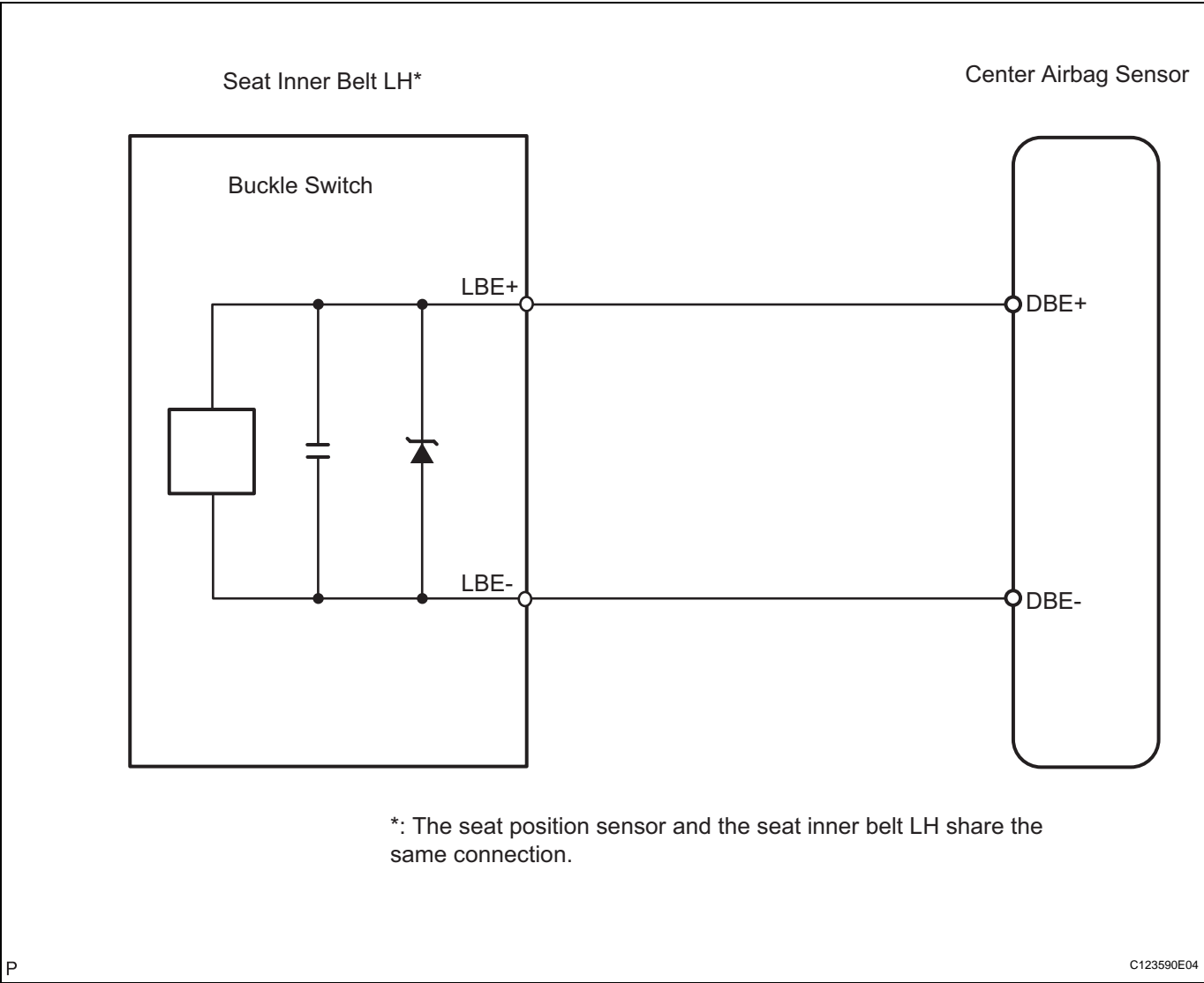
DESCRIPTION

The driver side seat belt buckle switch circuit consists of the center airbag sensor and the front seat inner belt LH.

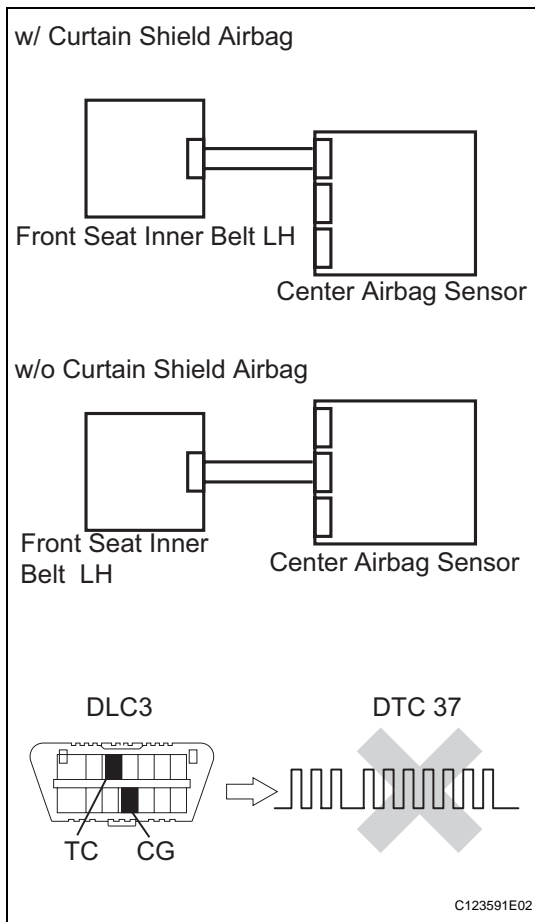
DTC B1655/37 is recorded when a malfunction is detected in the driver side seat belt buckle switch circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1655/37	When one of following conditions is met: <ul style="list-style-type: none"><li>Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in driver side seat belt buckle switch LH circuit for 2 seconds.</li><li>Front seat inner belt LH malfunction</li><li>Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>Floor wire</li><li>Front seat inner belt LH</li><li>Center airbag sensor</li></ul>

WIRING DIAGRAM



## INSPECTION PROCEDURE

**1 CHECK FOR DTC**

- (a) Turn the ignition switch ON, and wait for at least 60 seconds.
- (b) Clear the DTCs (see page [RS-49](#)).
- (c) Turn the ignition switch OFF.
- (d) Turn the ignition switch ON, and wait for at least 60 seconds.
- (e) Check the DTCs (see page [RS-49](#)).

**OK:****DTC B1655/37 is not output.****HINT:**

DTCs other than DTC B1655/37 may be output at this time, but they are not related to this check.

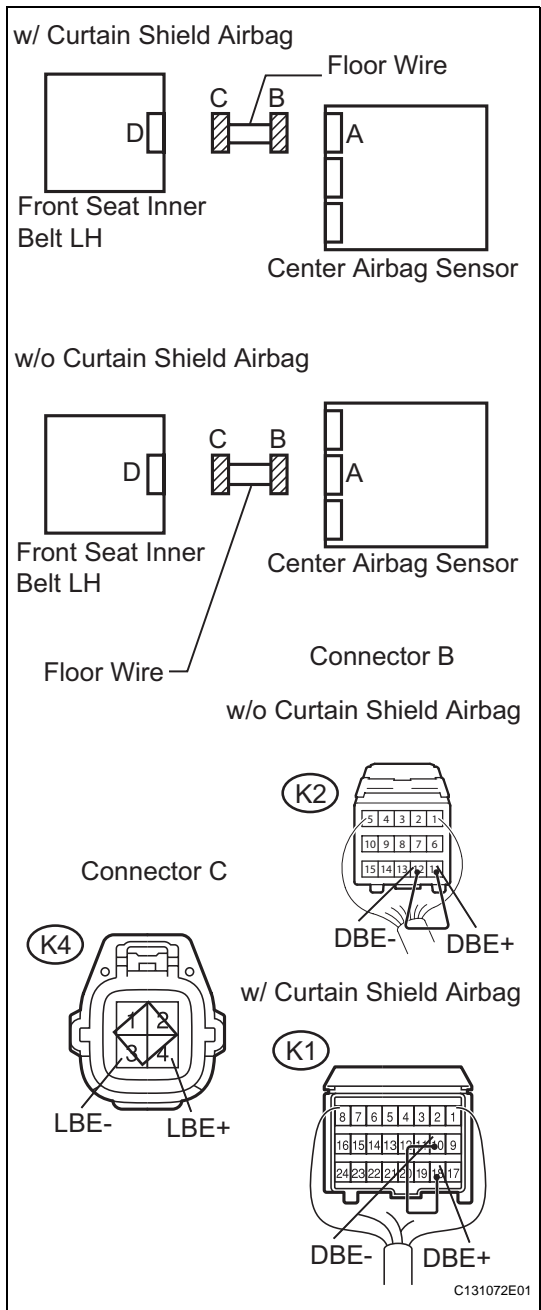
**OK****USE SIMULATION METHOD TO CHECK****NG****RS****2 CHECK CONNECTION OF CONNECTOR**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the center airbag sensor and the front seat inner belt LH.

**OK:****The connectors are properly connected.****NG****CONNECT CONNECTOR****OK**

3

CHECK FLOOR WIRE (OPEN)



- (a) Disconnect the connectors from the center airbag sensor and the front seat inner belt LH.
- (b) Using a service wire, connect K2-11 (LBE+) and K2-12 (LBE-) (w/o Curtain shield airbag), or K1-10 (DBE+) and K1-18 (DBE-) (w/Curtain shield airbag) of connector B.
- NOTICE:**  
Do not forcibly insert the service wire into the terminals of the connector when connecting.
- (c) Measure the resistance of the wire harness side connector.

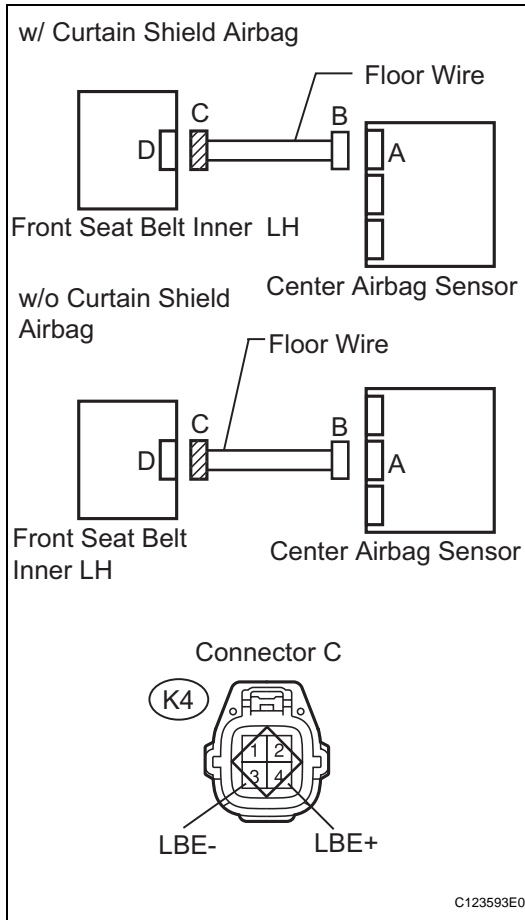
Standard resistance

Tester Connection	Specified Condition
K4-4 (LBE+) - K4-3 (LBE-)	Below 1 Ω

NG

REPAIR OR REPLACE FLOOR WIRE

OK

**4 CHECK FLOOR WIRE (SHORT)**

- (a) Disconnect the service wire from connector B.  
(b) Measure the resistance of the wire harness side connectors.

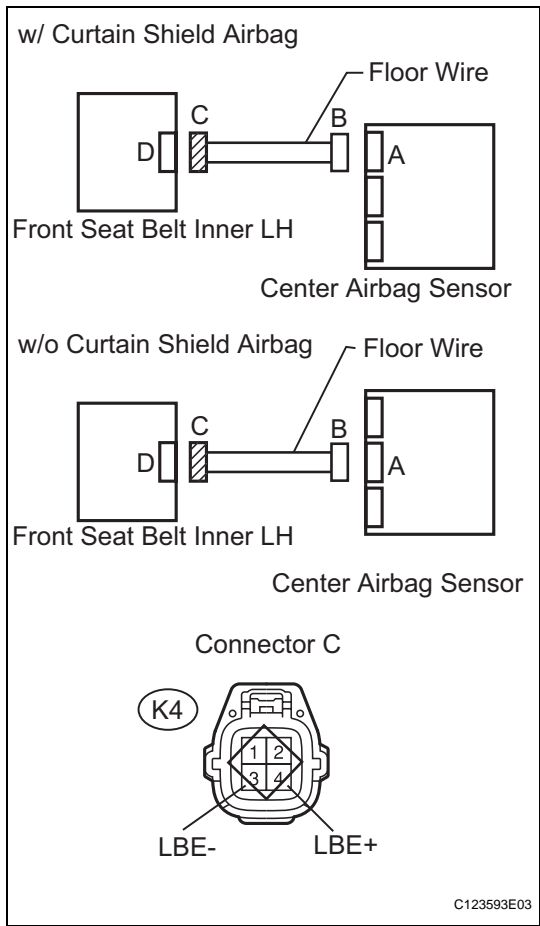
**Standard resistance**

Tester Connection	Specified Condition
K4-4 (LBE+) - K4-3 (LBE-)	1 MΩ or higher

**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

5

CHECK FLOOR WIRE (TO B+)



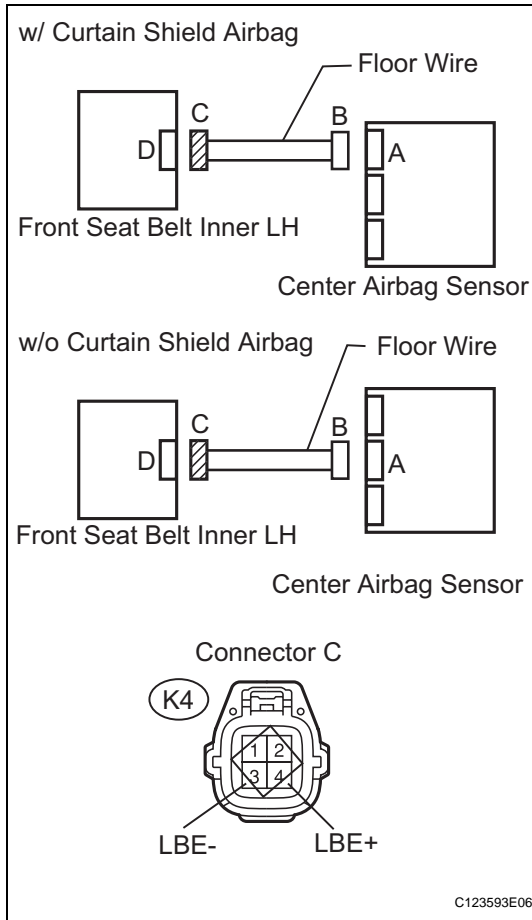
- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
K4-4 (LBE+) - Body ground	Below 1 V
K4-3 (LBE-) - Body ground	Below 1 V

NG

REPAIR OR REPLACE FLOOR WIRE

OK

**6 CHECK FLOOR WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connectors.

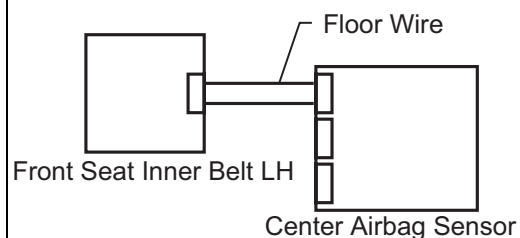
**Standard resistance**

Tester Connection	Specified Condition
K4-4 (LBE+) - Body ground	1 M $\Omega$ or higher
K4-3 (LBE-) - Body ground	1 M $\Omega$ or higher

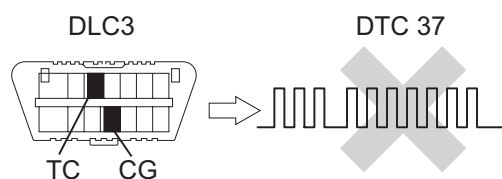
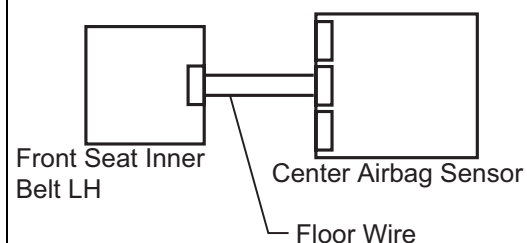
**NG****REPAIR OR REPLACE FLOOR WIRE****OK****RS**

## 7 CHECK FRONT SEAT INNER BELT ASSEMBLY LH

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



C123591E03

- Connect the connector to the center airbag sensor and the front seat inner belt LH.
- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page [RS-49](#)).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page [RS-49](#)).

**OK:**

**DTC B1655/37 is not output.**

**HINT:**

DTCs other than DTC B1655/37 may be output at this time, but they are not related to this check.

**OK**

**USE SIMULATION METHOD TO CHECK**

**NG**

## 8 REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Replace the front seat inner belt LH (see page [SB-21](#)).

**HINT:**

Perform the inspection using parts from a normal vehicle if possible.

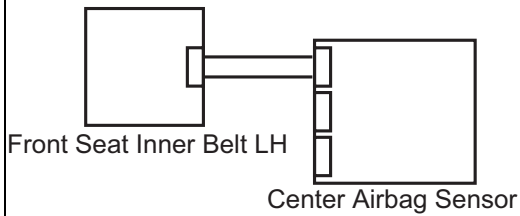
**NEXT**



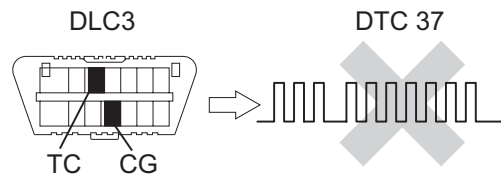
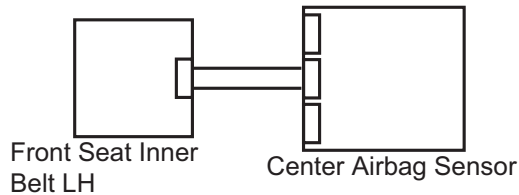
## 9

## CHECK CENTER AIRBAG SENSOR ASSEMBLY

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



C123591E04

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**OK:****DTC B1655/37 is not output.****HINT:**

DTCs other than DTC B1655/37 may be output at this time, but they are not related to this check.

**NG****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****OK****RS****END**

<b>DTC</b>	<b>B1660/43</b>	<b>Passenger Airbag ON / OFF Indicator Circuit Malfunction</b>
------------	-----------------	--

**DESCRIPTION**

The passenger airbag ON / OFF indicator circuit consists of the center airbag sensor and the heater control panel\*1 or \*2.

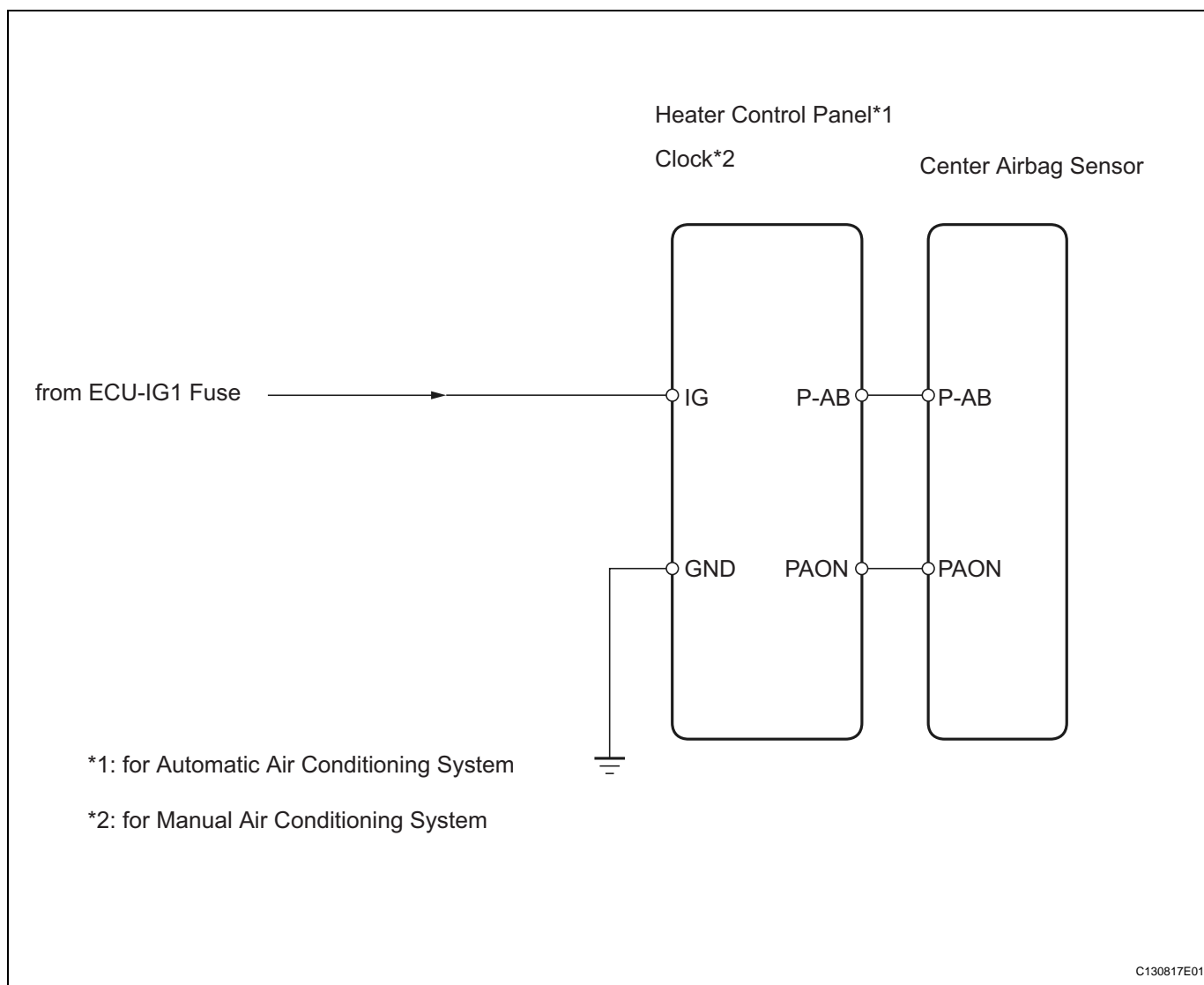
This circuit indicates the operation condition of the front passenger airbag, the front passenger side airbag and passenger side seat belt pretensioner.

DTC B1660/43 is set when a malfunction is detected in the passenger airbag ON / OFF indicator circuit.

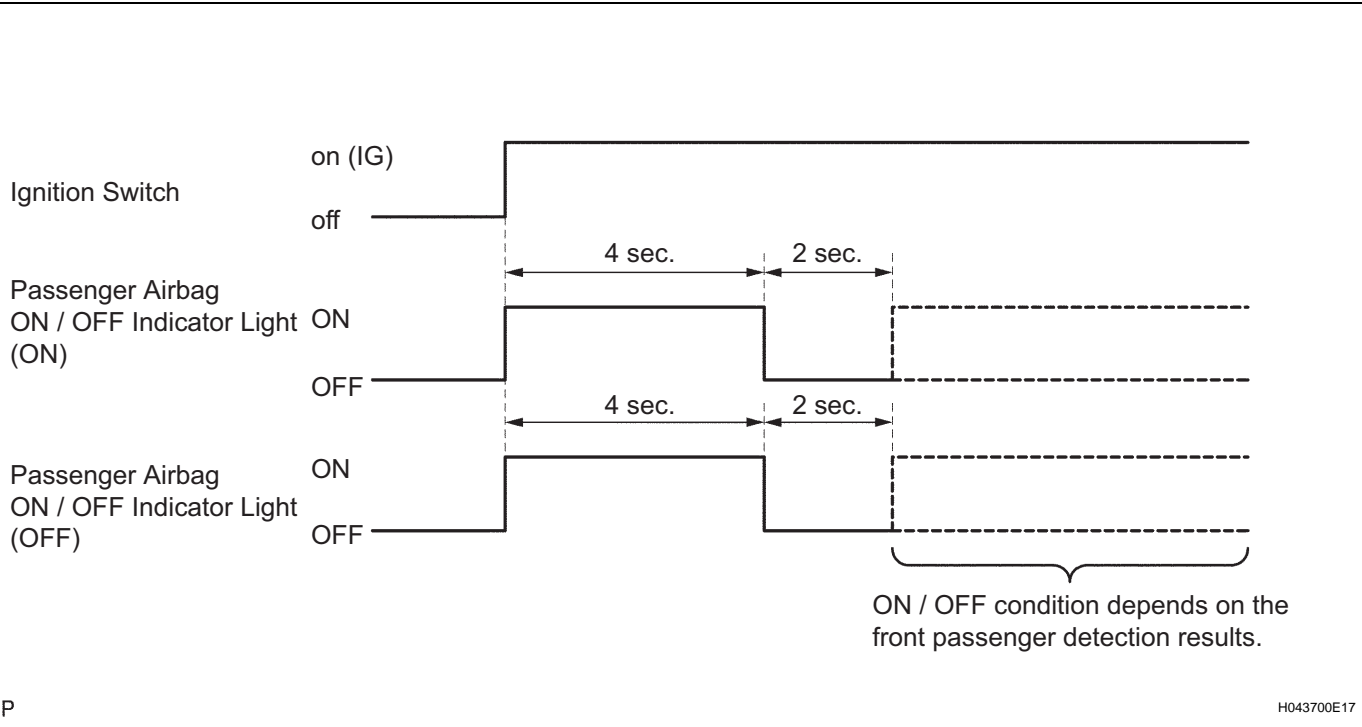
<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1660/43	When one of following conditions is met: <ul style="list-style-type: none"><li>Center airbag sensor detects line short signal, open signal, short to ground signal or short to B+ signal in passenger airbag ON / OFF indicator circuit for 2 seconds</li><li>Front passenger seat belt warning light malfunction</li><li>Center airbag sensor malfunction</li></ul>	<ul style="list-style-type: none"><li>Instrument panel wire</li><li>Front passenger airbag ON / OFF indicator light</li><li>Center airbag sensor</li></ul>

**HINT:**

- \*1: for Automatic Air Conditioning System
- \*2: for Manual Air Conditioning System

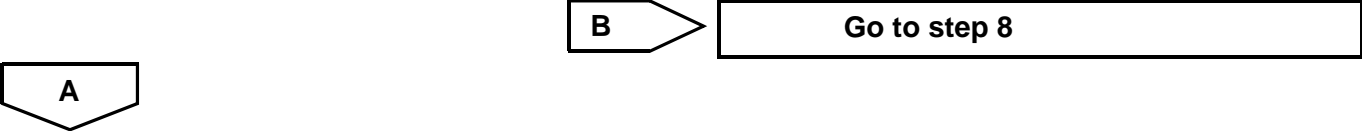
**WIRING DIAGRAM****RS****INSPECTION PROCEDURE****1****CHECK PASSENGER AIRBAG ON/OFF INDICATOR OPERATION**

- (a) Turn the ignition switch ON.
- (b) Check the passenger airbag ON / OFF indicator operation.



Result

ON / OFF Indicator Illumination	Proceed to
Always ON	A
OFF	B



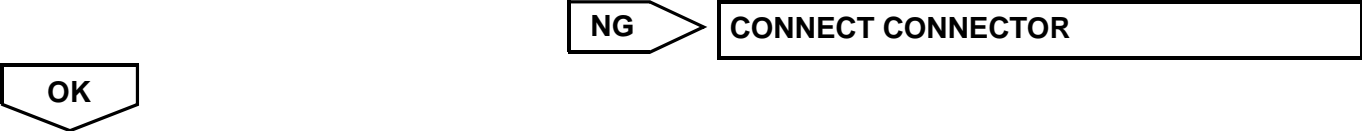
RS

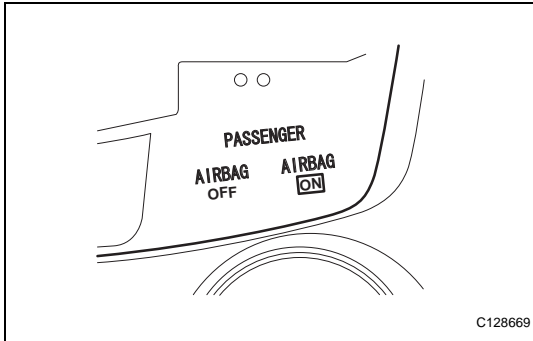
2

CHECK CONNECTION OF CONNECTOR

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the center airbag sensor and the front passenger seat belt warning light.

OK:  
The connectors are properly connected.



**3****CHECK FRONT PASSENGER AIRBAG ON/OFF INDICATOR LIGHT**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connector from the center airbag sensor.
- (d) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (e) Turn the ignition switch ON.
- (f) Check the passenger airbag ON / OFF indicator operation.

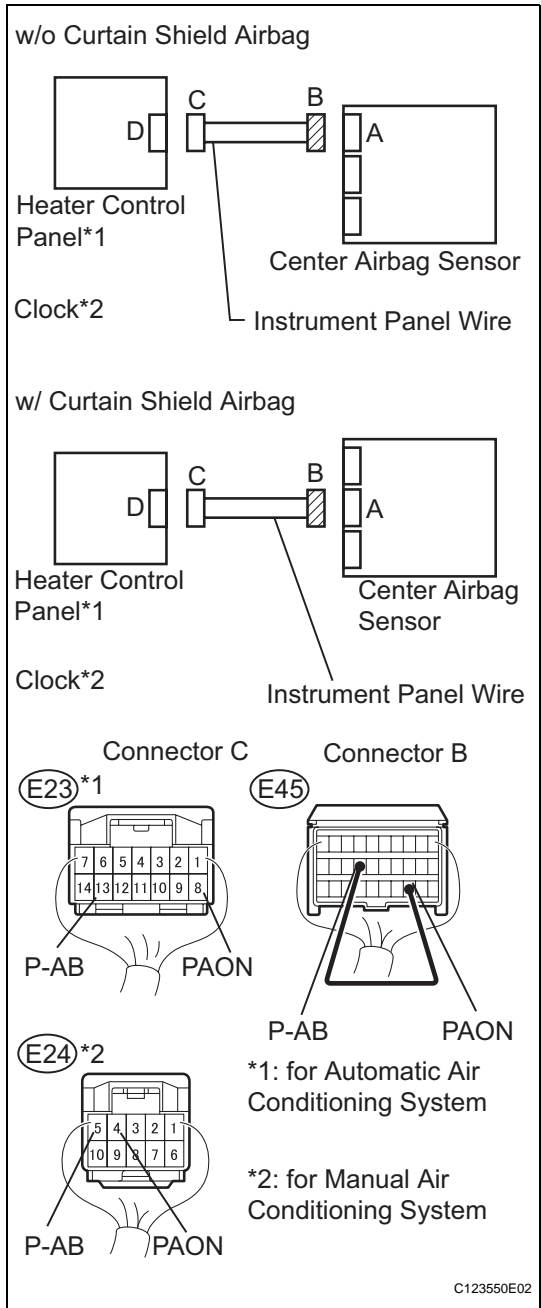
**OK:**

**Neither ON nor OFF passenger airbag ON / OFF indicator comes on.**

**OK****Go to step 14****NG**

4

CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connector from the front passenger airbag ON / OFF indicator light.
- (d) Using a service wire, connect E45-23 (PAON) and E45-17 (P-AB) of connector B.
- (e) Measure the resistance of the wire harness side connectors.

**NOTICE:**  
Do not forcibly insert the service wire into the terminals of the connector when connecting.

Standard resistance

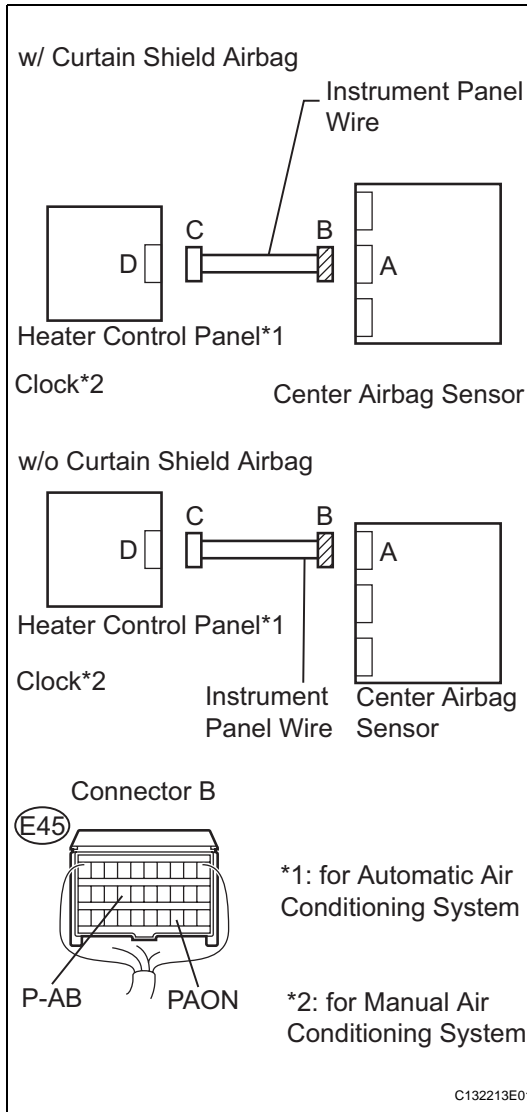
Tester Connection	Specified Condition
E23-5 (PAON) - E23-13 (P-AB)*1	Below 1 Ω
E22-4 (PAON) - E22-9 (P-AB)*2	Below 1 Ω

HINT:  
\*1: for Automatic Air Conditioning System  
\*2: for Manual Air Conditioning System

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

**5****CHECK INSTRUMENT PANEL WIRE (FOR SHORT)**

- (a) Disconnect the service wire from connector B.  
(b) Measure the resistance of the wire harness side connectors.

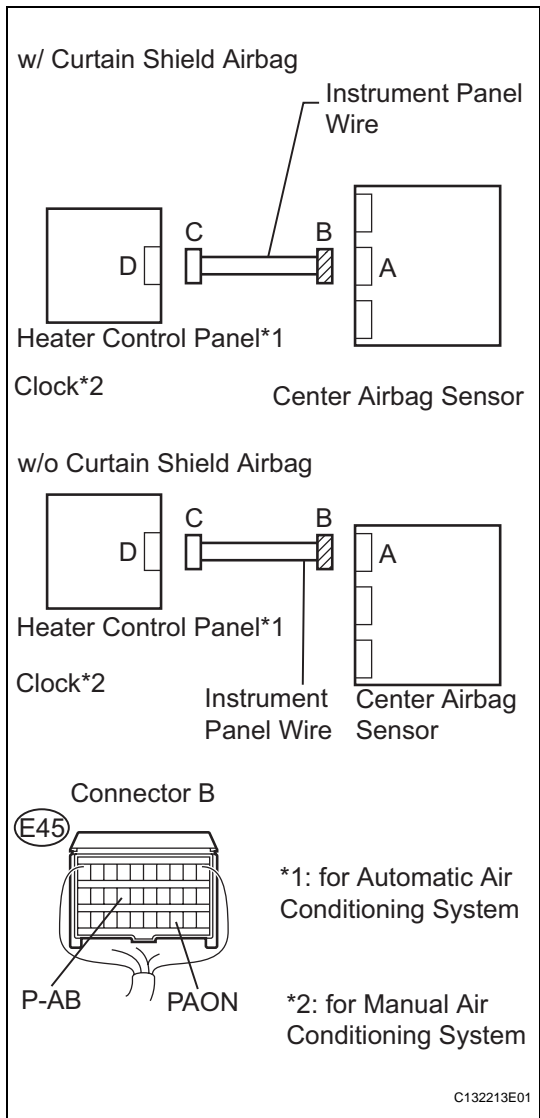
**Standard resistance**

Tester Connection	Specified Condition
E45-17 (P-AB) - E45-23 (PAON)	1 MΩ or higher

**NG****REPAIR OR REPLACE INSTRUMENT PANEL WIRE****OK****RS**

6

CHECK INSTRUMENT PANEL WIRE (TO B+)



- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage of the wire harness side connectors.

Standard voltage

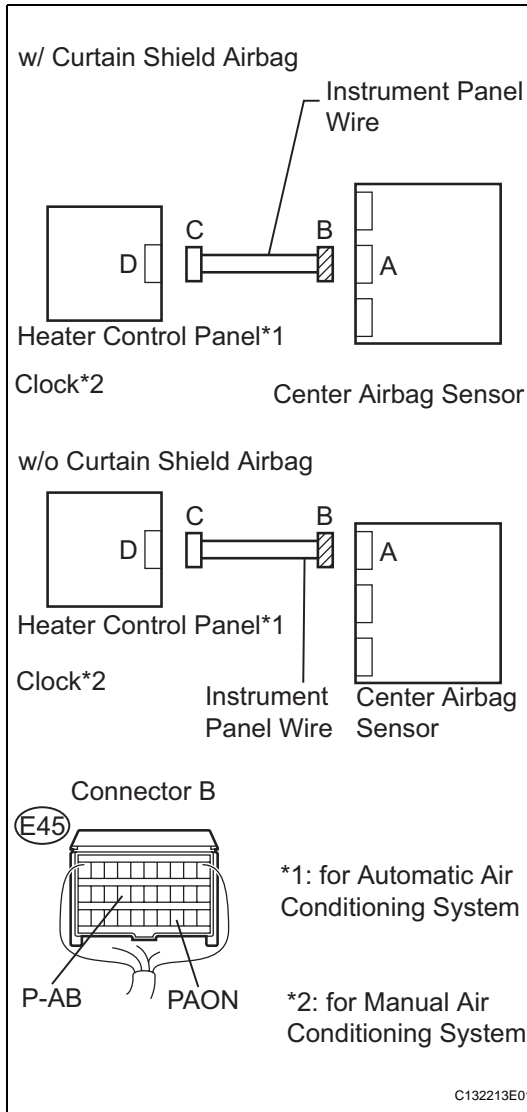
Tester Connection	Specified Condition
E45-23 (PAON) - Body ground	Below 1 V
E45-17 (P-AB) - Body ground	Below 1 V

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK



**7 CHECK INSTRUMENT PANEL WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connectors.

**Standard resistance**

Tester Connection	Specified Condition
E45-17 (P-AB) -Body ground	1 M $\Omega$ or higher
E45-23 (PAON) -Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE INSTRUMENT PANEL WIRE****OK****RS****REPLACE FRONT PASSENGER AIRBAG ON/OFF INDICATOR LIGHT****8 CHECK CONNECTION OF CONNECTOR**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Check that the connectors are properly connected to the center airbag sensor and the heater control panel\*1 or clock\*2.

**OK:****The connectors are properly connected.**

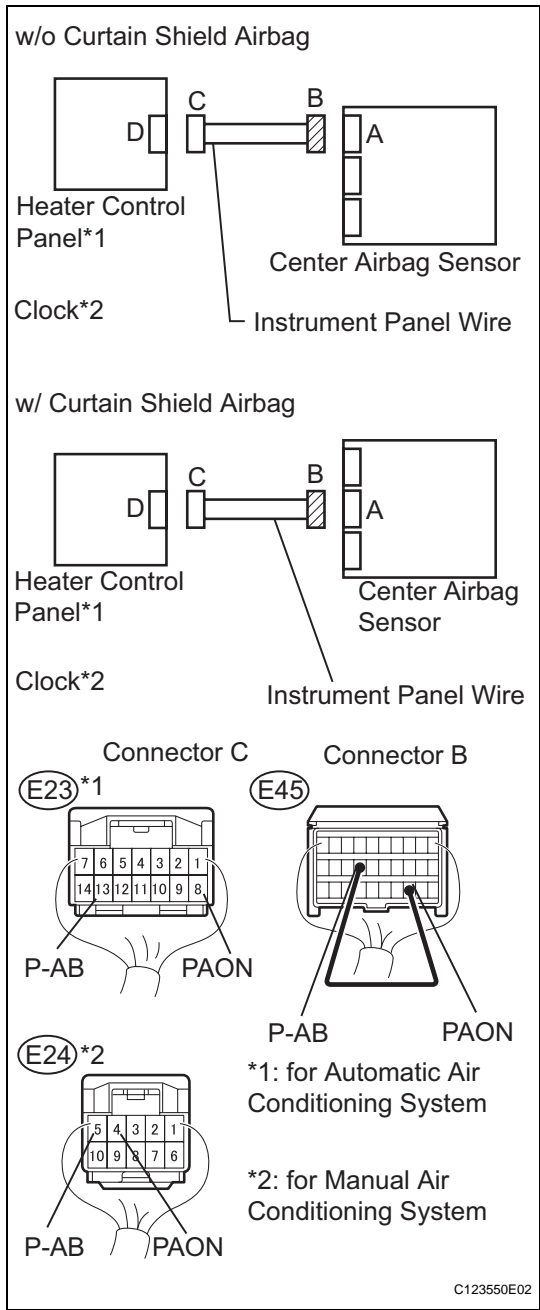
NG

CONNECT CONNECTOR

OK

9

CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



- (a) Disconnect the connector from the front passenger airbag ON / OFF indicator light
- (b) Using a service wire, connect E45-23 (PAON) and E45-17 (P-AB) of connector B.
- NOTICE:**  
Do not forcibly insert the service wire into the terminals of the connector when connecting.
- (c) Measure the resistance of the wire harness side connectors.
- Standard resistance**

Tester Connection	Specified Condition
E23-5 (PAON) - E23-13(P-AB)*1	Below 1 Ω
E22-4 (PAON) - E22-9(P-AB)*2	Below 1 Ω

HINT:

\*1: for Automatic Air Conditioning System

\*2: for Manual Air Conditioning System

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

10 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)

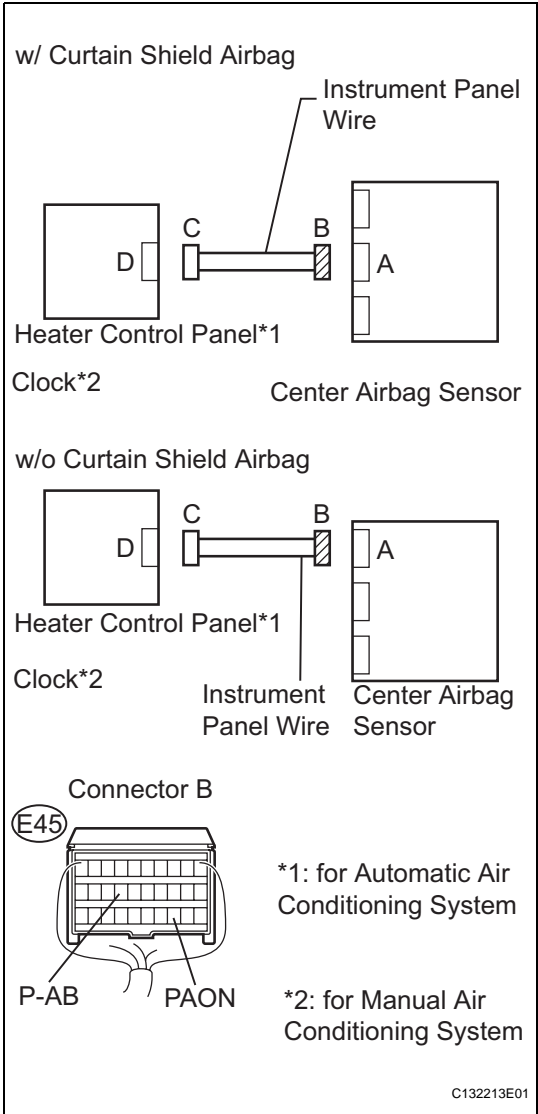
- (a) Disconnect the service wire from connector B.
- (b) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
E45-17 (P-AB) - E45-23 (PAON)	1 MΩ or higher

NG

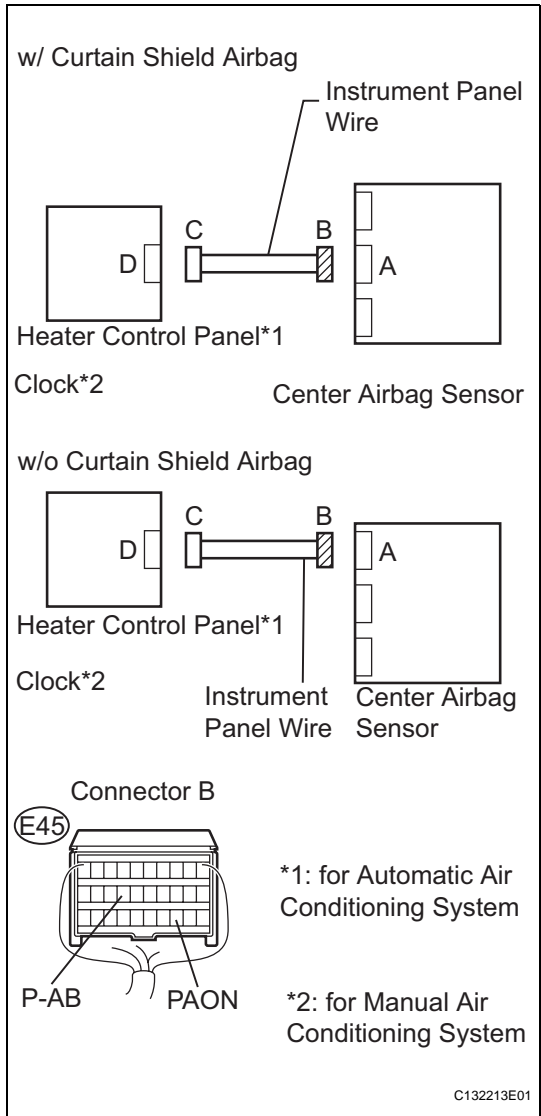
REPAIR OR REPLACE INSTRUMENT PANEL WIRE



OK

11

CHECK INSTRUMENT PANEL WIRE (TO B+)

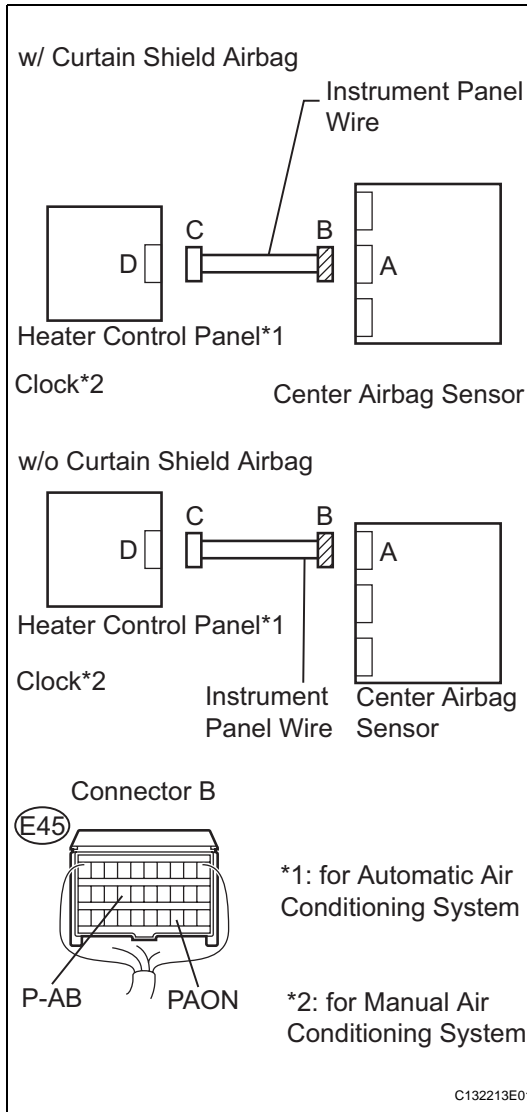


- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
E45-23 (PAON) - Body ground	Below 1 V
E45-17 (P-AB) - Body ground	Below 1 V

**NG** **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

**OK**

**12 CHECK INSTRUMENT PANEL WIRE (TO GROUND)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

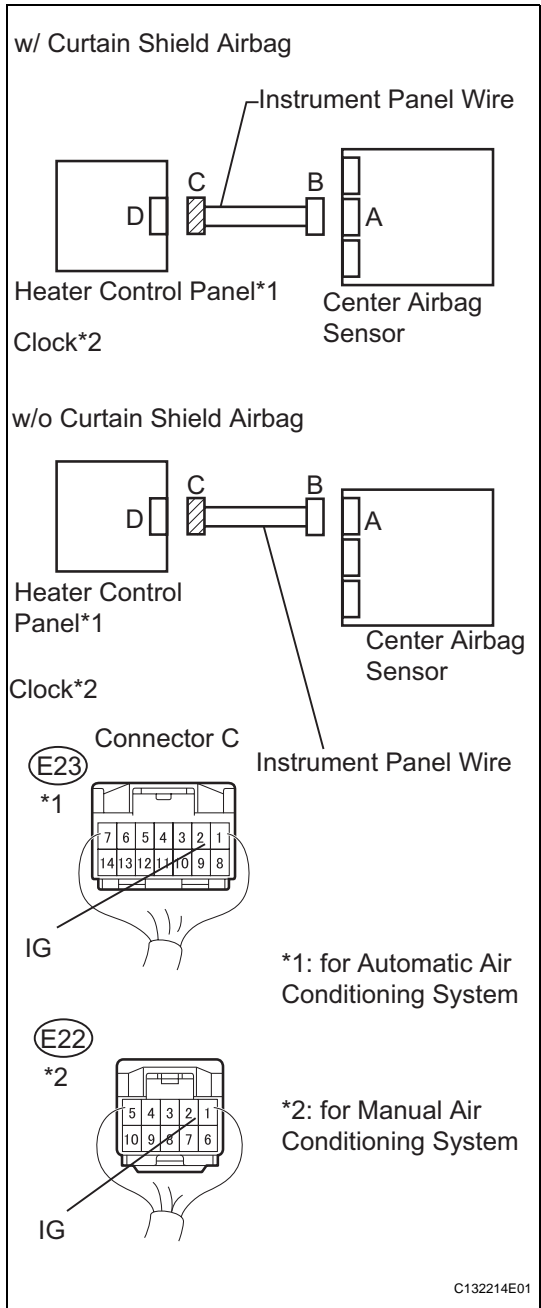
**Standard resistance**

Tester Connection	Specified Condition
E45-17 (P-AB) - Body ground	1 M $\Omega$ or higher
E45-23 (PAON) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE INSTRUMENT PANEL WIRE****OK****RS**

13

CHECK WIRE HARNESS (POWER SOURCE)



- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
E23-2 (IG+) - Body ground*1	10 to 14 V
E22-2 (IG+) - Body ground*2	10 to 14 V

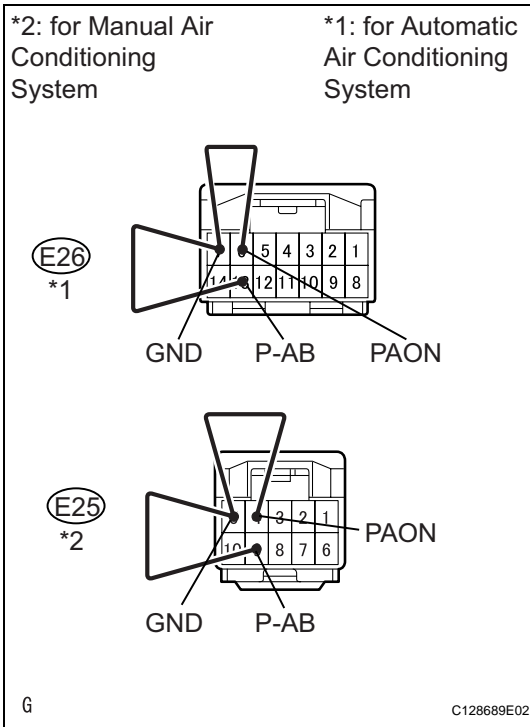
HINT:

\*1: for Automatic Air Conditioning System

\*2: for Manual Air Conditioning System

**NG** **REPAIR OR REPLACE POWER SOURCE CIRCUIT**

**OK**

**14****CHECK FRONT PASSENGER AIRBAG ON/OFF INDICATOR LIGHT**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connector from the heater control panel\*1 or clock sub-assembly\*2.
- (d) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (e) Using a service wire, connect E23-6\*1 E22-4\*2 (PAON) and E23-7\*1 E22-5\*2 (GND) of the heater control panel \*1 or clock\*2.  
HINT:  
\*1: for Automatic Air Conditioning System  
\*2: for Manual Air Conditioning System
- (f) Using a service wire, connect E23-13\*1 E22-9\*2 (P-AB) and E23-7 \*1 E22-5\*2 (GND) of the heater control panel \*1 or clock\*2.  
HINT:  
\*1: for Automatic Air Conditioning System  
\*2: for Manual Air Conditioning System
- (g) Turn the ignition switch ON.
- (h) Check the passenger airbag ON / OFF indicator operation.

**OK:**

Front passenger airbag ON / OFF indicator comes on

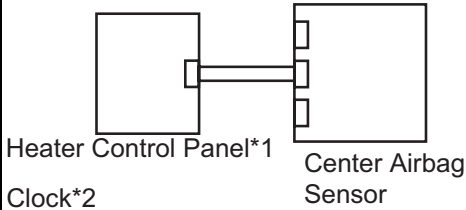
**NG**

**REPLACE FRONT PASSENGER AIRBAG ON/OFF INDICATOR LIGHT**

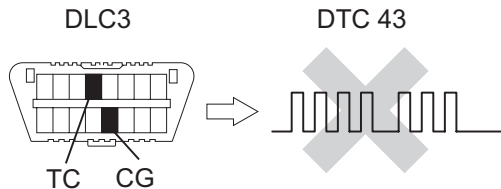
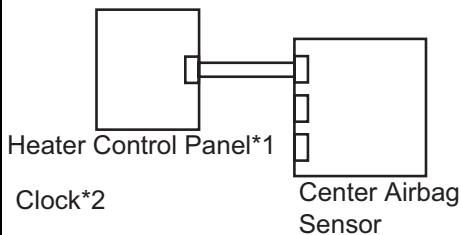
**OK****RS**

# 15 CHECK CENTER AIRBAG SENSOR ASSEMBLY

w/ Curtain Shield Airbag



w/ Curtain Shield Airbag



1\*: for Automatic Air Conditioning System

2\*: for Manual Air Conditioning System

C132215E01

- (a) Turn the ignition switch OFF.
  - (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- HINT:
- \*1: for Automatic Air Conditioning System
  - \*2: for Manual Air Conditioning System
- (c) Connect the connector to the center airbag sensor.
  - (d) Connect the connector to the heater control panel\*1 or clock\*2.
  - (e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
  - (f) Turn the ignition switch ON, and wait for at least 60 seconds.
  - (g) Clear the DTCs (see page RS-49).
  - (h) Turn the ignition switch OFF.
  - (i) Turn the ignition switch ON, and wait for at least 60 seconds.
  - (j) Check for DTCs (see page RS-49).

**OK:**

**DTC B1660/43 is not output.**

HINT:

DTCs other than B1660/43 may be output at this time, but they are not related to this check.

**NG**

**REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

**OK**

**USE SIMULATION METHOD TO CHECK**



<b>DTC</b>	<b>B1800/51</b>	<b>Short in Driver Side Squib Circuit</b>
<b>DTC</b>	<b>B1801/51</b>	<b>Open in Driver Side Squib Circuit</b>
<b>DTC</b>	<b>B1802/51</b>	<b>Short to GND in Driver Side Squib Circuit</b>
<b>DTC</b>	<b>B1803/51</b>	<b>Short to B+ in Driver Side Squib Circuit</b>

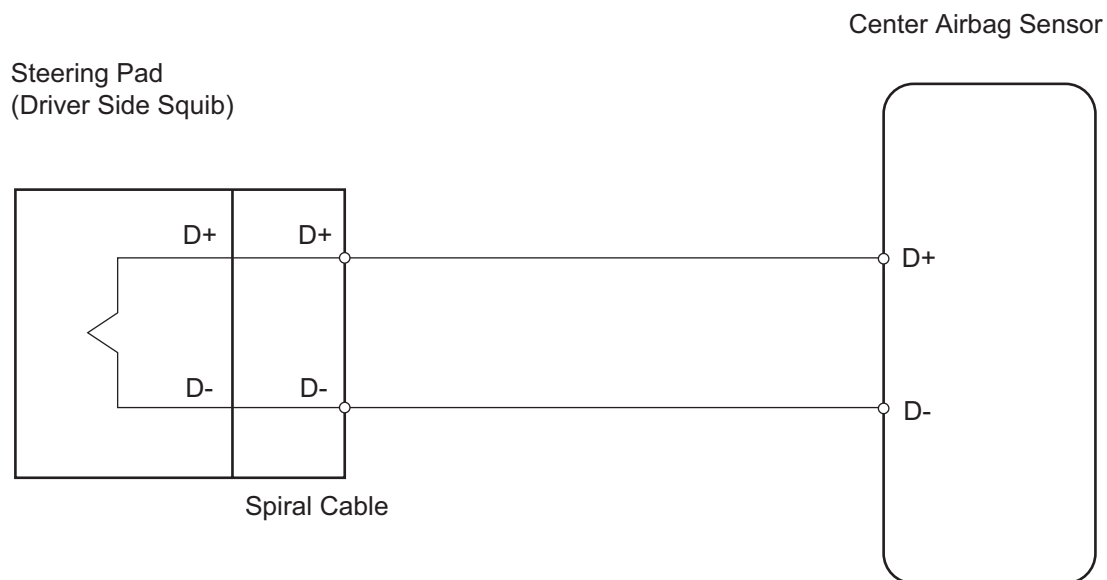
## DESCRIPTION

The driver side squib circuit consists of the center airbag sensor, the spiral cable and the steering pad. The circuit instructs the SRS to deploy when the deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the driver side squib circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1800/51	Center airbag sensor receives a line short signal 5 times in the driver side squib circuit during primary check.	<ul style="list-style-type: none"> <li>• Instrument panel wire</li> <li>• Spiral cable</li> <li>• Steering pad (Driver side squib)</li> <li>• Center airbag sensor</li> </ul>
B1801/51	Center airbag sensor receives an open signal in the driver side squib circuit for 2 seconds.	<ul style="list-style-type: none"> <li>• Instrument panel wire</li> <li>• Spiral cable</li> <li>• Steering pad (Driver side squib)</li> <li>• Center airbag sensor</li> </ul>
B1802/51	Center airbag sensor receives a short to ground signal in the driver side squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>• Instrument panel wire</li> <li>• Spiral cable</li> <li>• Steering pad (Driver side squib)</li> <li>• Center airbag sensor</li> </ul>
B1803/51	Center airbag sensor receives a short to B+ signal in the driver side squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>• Instrument panel wire</li> <li>• Spiral cable</li> <li>• Steering pad (Driver side squib)</li> <li>• Center airbag sensor</li> </ul>

## WIRING DIAGRAM



RS

T

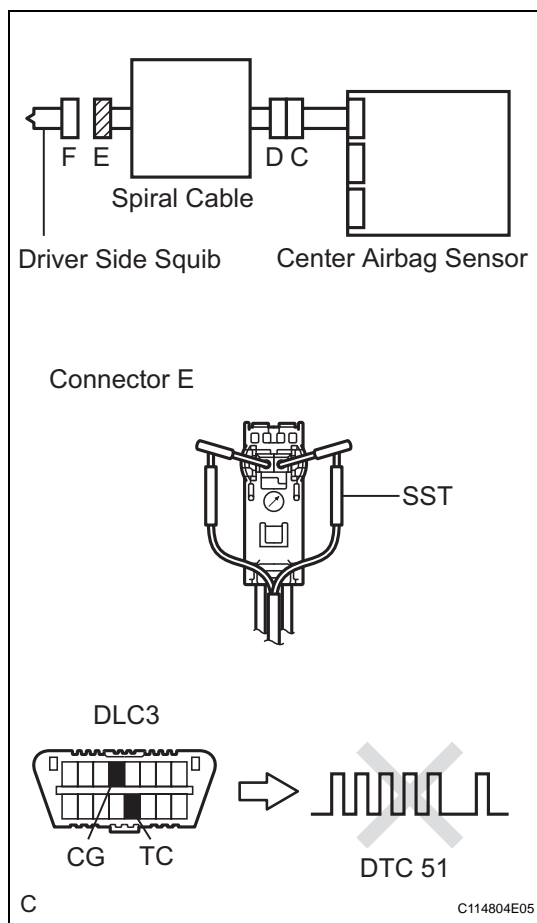
H101253E07

## INSPECTION PROCEDURE

## HINT:

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

# 1 CHECK STEERING PAD (DRIVER SIDE SQUIB)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connectors from the steering pad.
- (d) Connect the white wire side of SST (resistance 2.1  $\Omega$ ) to connector E.

## CAUTION:

**Never connect a tester to the steering pad (driver side squib) for measurement, as this may lead to a serious injury due to airbag deployment.**

## NOTICE:

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

## SST 09843-18060

- (e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (f) Turn the ignition switch on (IG), and wait for at least 60 seconds.
- (g) Clear the DTCs (see page RS-49).
- (h) Turn the ignition switch OFF.
- (i) Turn the ignition switch ON, and wait for at least 60 seconds.
- (j) Check the DTCs (see page RS-49).

## OK:

**DTC B1800, B1801, B1802, B1803 or 51 is not output.**

## HINT:

DTCs other than DTC B1800, B1801, B1802, B1803 or 51 may be output at this time, but they are not related to this check.

OK

REPLACE STEERING PAD

NG

# 2 CHECK CONNECTOR

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect SST from the spiral cable.
- (d) Check that the spiral cable connectors (on the steering pad side) are not damaged.

## OK:

**Lock button is not disengaged, and claw of lock is not deformed or damaged.**

NG

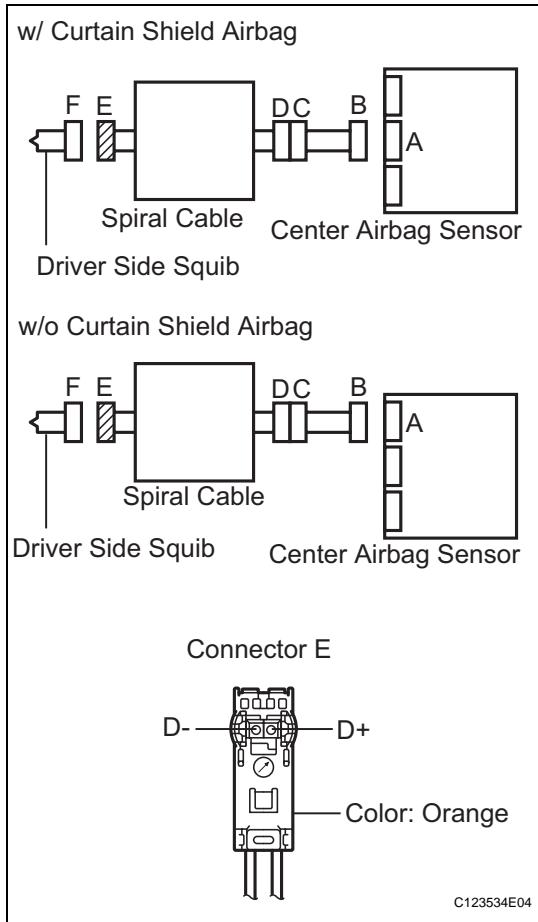
REPLACE SPIRAL CABLE

RS

OK

3

CHECK DRIVER SIDE SQUIB CIRCUIT



- (a) Disconnect the connectors from the center airbag sensor.
- (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (c) Turn the ignition switch ON.
- (d) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
D+ - Body ground	Below 1 V
D- - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
- (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (g) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
D+ - D-	Below 1 Ω
D+ - Body ground	1 MΩ or higher
D- - Body ground	1 MΩ or higher

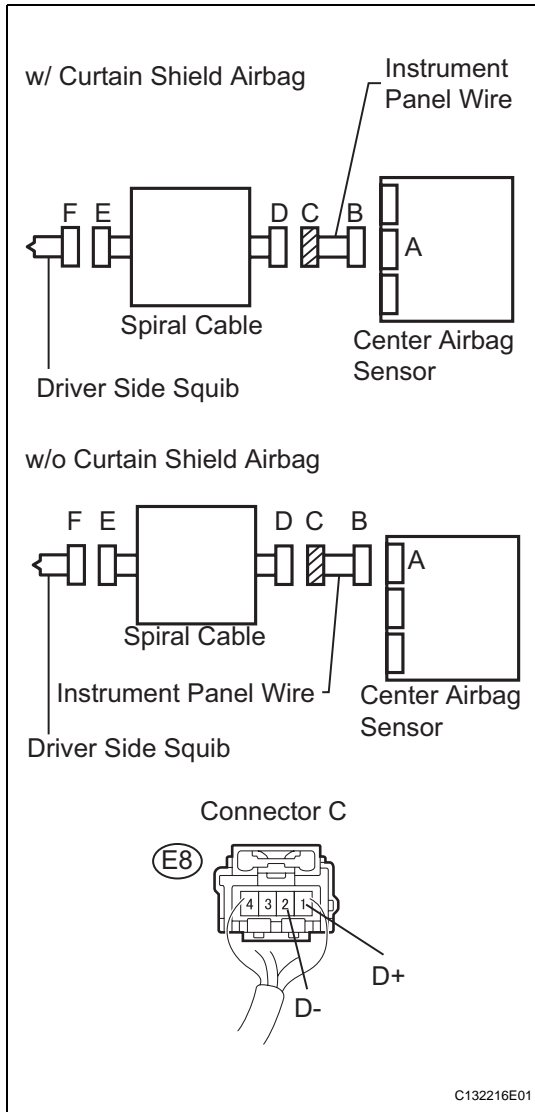
- (h) Release the activation prevention mechanism built into connector B (see page RS-37).
- (i) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
D+ - D-	1 MΩ or higher

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

NG

**4 CHECK INSTRUMENT PANEL WIRE**

- Restore the released activation prevention mechanism of connector B to its original position.
- Disconnect the instrument panel wire connector from the spiral cable.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
E8-1 (D+) - Body ground	Below 1 V
E8-2 (D-) - Body ground	Below 1 V

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
E8-1 (D+) - E8-2 (D-)	Below 1 $\Omega$
E8-1 (D+) - Body ground	1 M $\Omega$ or higher
E8-2 (D-) - Body ground	1 M $\Omega$ or higher

- Release the activation prevention mechanism built into connector B (see page RS-52).
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
E8-1 (D+) - E8-2 (D-)	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE INSTRUMENT PANEL WIRE****OK****REPLACE SPIRAL CABLE****RS**

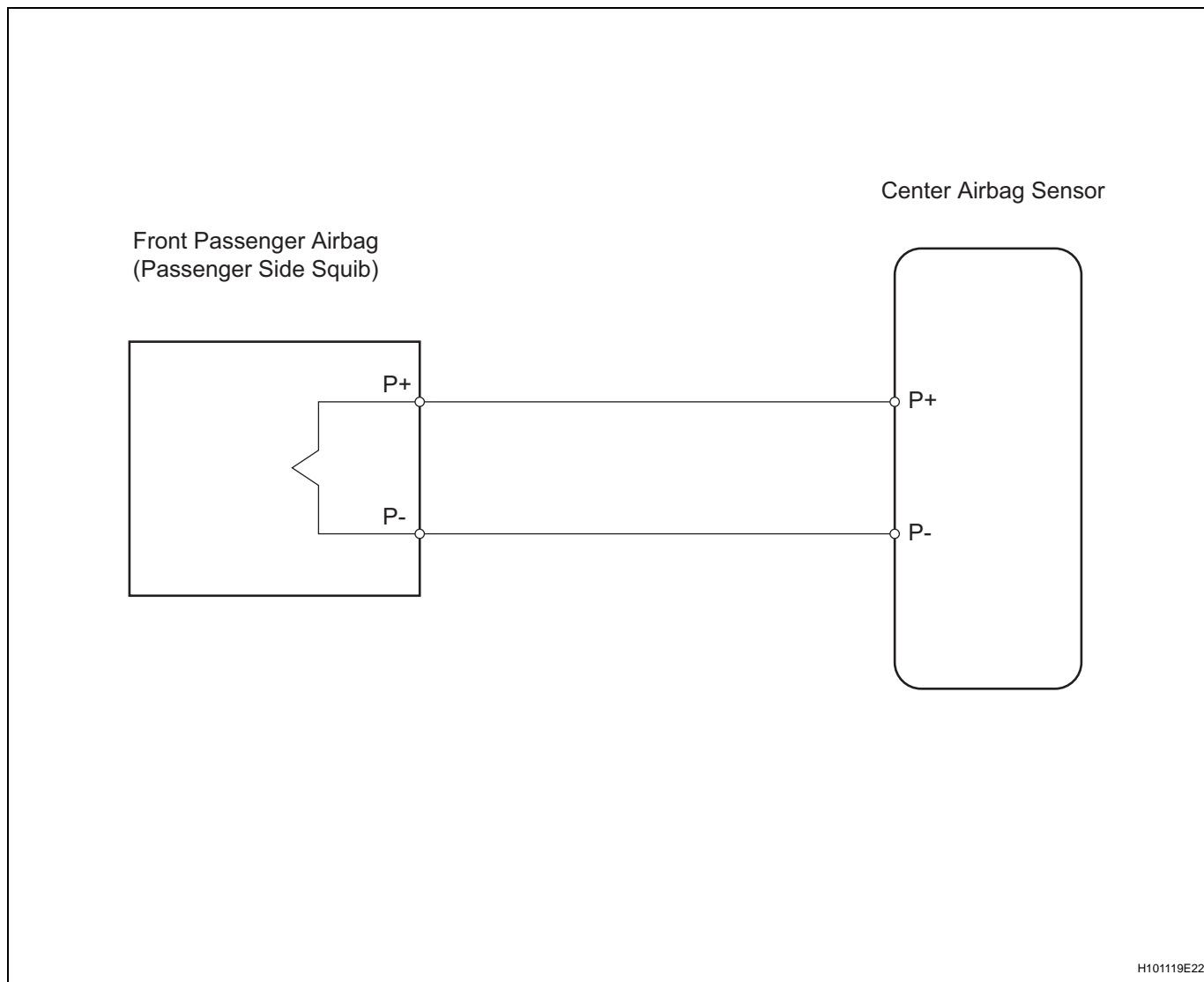
<b>DTC</b>	<b>B1805/52</b>	<b>Short in Front Passenger Side Squib Circuit</b>
<b>DTC</b>	<b>B1806/52</b>	<b>Open in Front Passenger Side Squib Circuit</b>
<b>DTC</b>	<b>B1807/52</b>	<b>Short to GND in Front Passenger Side Squib Circuit</b>
<b>DTC</b>	<b>B1808/52</b>	<b>Short to B+ in Front Passenger Side Squib Circuit</b>

## DESCRIPTION

The front passenger side squib circuit consists of the center airbag sensor and the front passenger airbag. The circuit instructs the SRS to deploy when the deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the front passenger side squib circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1805/52	Center airbag sensor receives a line short signal 5 times in the front passenger side squib circuit during primary check.	<ul style="list-style-type: none"> <li>• No. 1 Instrument panel wire</li> <li>• No. 2 Instrument panel wire</li> <li>• Front passenger airbag (Front passenger side squib)</li> <li>• Center airbag sensor</li> </ul>
B1806/52	Center airbag sensor assembly receives an open circuit signal in the front passenger side squib circuit for 2 seconds.	<ul style="list-style-type: none"> <li>• No. 1 Instrument panel wire</li> <li>• No. 2 Instrument panel wire</li> <li>• Front passenger airbag (Front passenger side squib)</li> <li>• Center airbag sensor</li> </ul>
B1807/52	Center airbag sensor receives a short to ground signal in the front passenger side squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>• No. 1 Instrument panel wire</li> <li>• No. 2 Instrument panel wire</li> <li>• Front passenger airbag (Front passenger side squib)</li> <li>• Center airbag sensor</li> </ul>
B1808/52	Center airbag sensor receives a short to B+ signal in the front passenger side squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>• No. 1 Instrument panel wire</li> <li>• No. 2 Instrument panel wire</li> <li>• Front passenger airbag (Front passenger side squib)</li> <li>• Center airbag sensor</li> </ul>

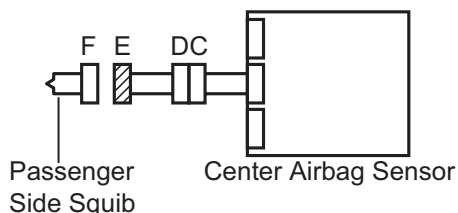
**WIRING DIAGRAM****RS****INSPECTION PROCEDURE****HINT:**

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

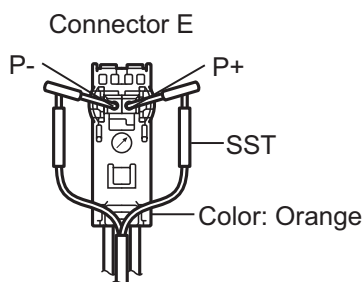
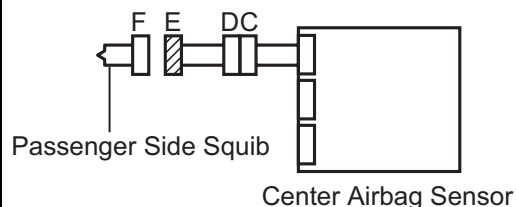
## 1

## CHECK FRONT PASSENGER AIRBAG ASSEMBLY (FRONT PASSENGER SIDE SQUIB)

w/ Curtain Shield Airbag

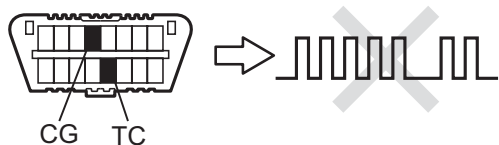


w/ Curtain Shield Airbag



DLC3

DLC 52



C128641E02

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Disconnect the connectors from the front passenger airbag.
- Connect the white wire side of SST (resistance 2.1  $\Omega$ ) to the instrument panel wire connector E.

**CAUTION:**

**Never connect a tester to the front passenger airbag (front passenger side squib) for measurement, as this may lead to a serious injury due to airbag deployment.**

**NOTICE:**

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

**SST 09843-18060**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**OK:**

**DTC B1805, B1806, B1807, B1808 or 52 is not output.**

**HINT:**

DTCs other than DTC B1805, B1806, B1807, B1808 or 52 may be output at this time, but they are not related to this check.

OK

**REPLACE FRONT PASSENGER AIRBAG ASSEMBLY**

NG

## 2

## CHECK CONNECTOR

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Disconnect SST from the instrument panel wire.
- Check that the instrument panel wire connectors (on the front passenger side airbag) are not damaged.



OK:

Lock button is not disengaged, and claw of lock is not deformed or damaged.

NG

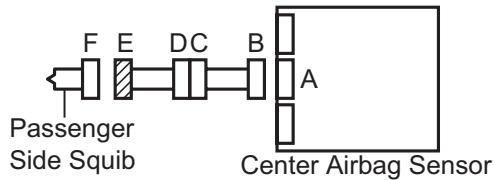
Go to step 4

OK

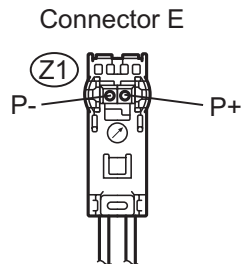
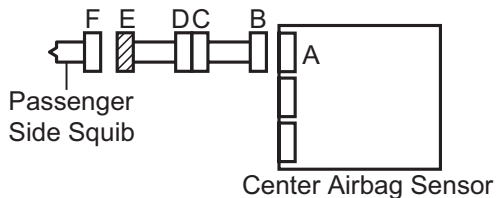
3

## CHECK INSTRUMENT PANEL WIRE

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



C128642E03

- Disconnect the connector from the center airbag sensor.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
Z1-1 (P+) - Body ground	Below 1 V
Z1-2 (P-) - Body ground	Below 1 V

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
Z1-1 (P+) - Z1-2 (P-)	Below 1 $\Omega$
Z1-1 (P+) - Body ground	1 M $\Omega$ or higher
Z1-2 (P-) - Body ground	1 M $\Omega$ or higher

- Release the activation prevention mechanism built into connector B (see page RS-37).
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
Z1-1 (P+) - Z1-2 (P-)	1 M $\Omega$ or higher

OK

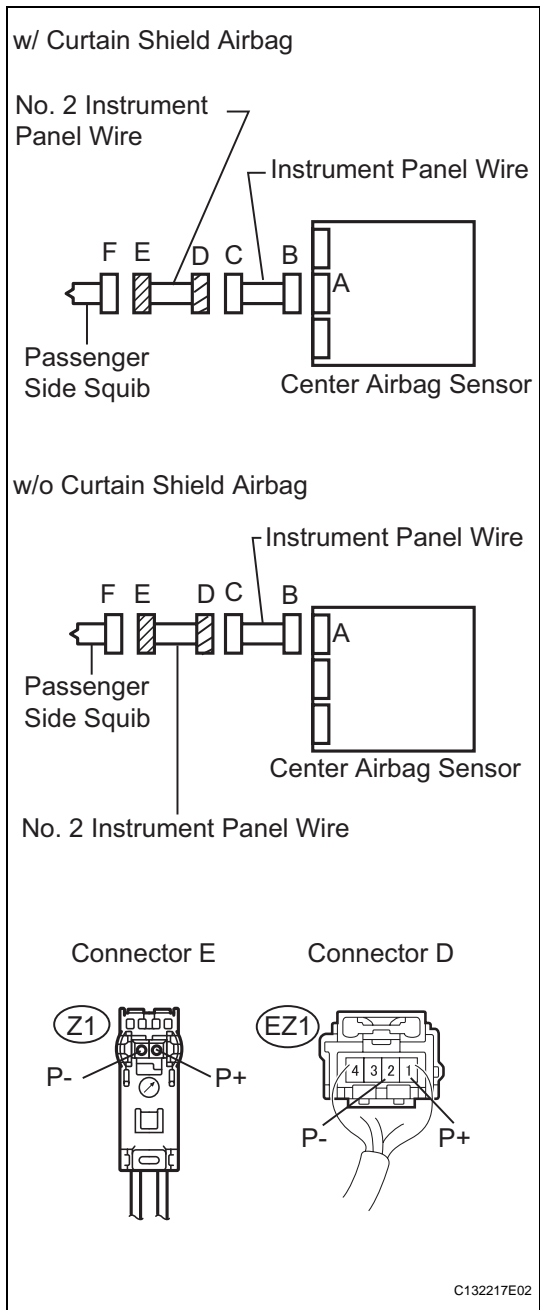
**REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

NG

RS

4

CHECK NO. 2 INSTRUMENT PANEL WIRE



- (a) Disconnect the No. 2 floor wire connector from the floor wire.
- (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (c) Turn the ignition switch ON.
- (d) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
Z1-1 (P+) - Body ground	Below 1 V
Z1-2 (P-) - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
- (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (g) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
Z1-2 (P-) - EZ1-2	Below 1 $\Omega$
Z1-1 (P+) - EZ1-1	Below 1 $\Omega$
Z1-2 (P-) - Z1-1 (P+)	1 M $\Omega$ or higher
Z1-2 (P-) - Body ground	1 M $\Omega$ or higher
Z1-1 (P+) - Body ground	1 M $\Omega$ or higher

NG

REPAIR OR REPLACE NO. 2 INSTRUMENT PANEL WIRE

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

<b>DTC</b>	<b>B1810/53</b>	<b>Short in Driver Side Squib 2nd Step Circuit</b>
<b>DTC</b>	<b>B1811/53</b>	<b>Open in Driver Side Squib 2nd Step Circuit</b>
<b>DTC</b>	<b>B1812/53</b>	<b>Short to GND in Driver Side Squib 2nd Step Circuit</b>
<b>DTC</b>	<b>B1813/53</b>	<b>Short to B+ in Driver Side Squib 2nd Step Circuit</b>

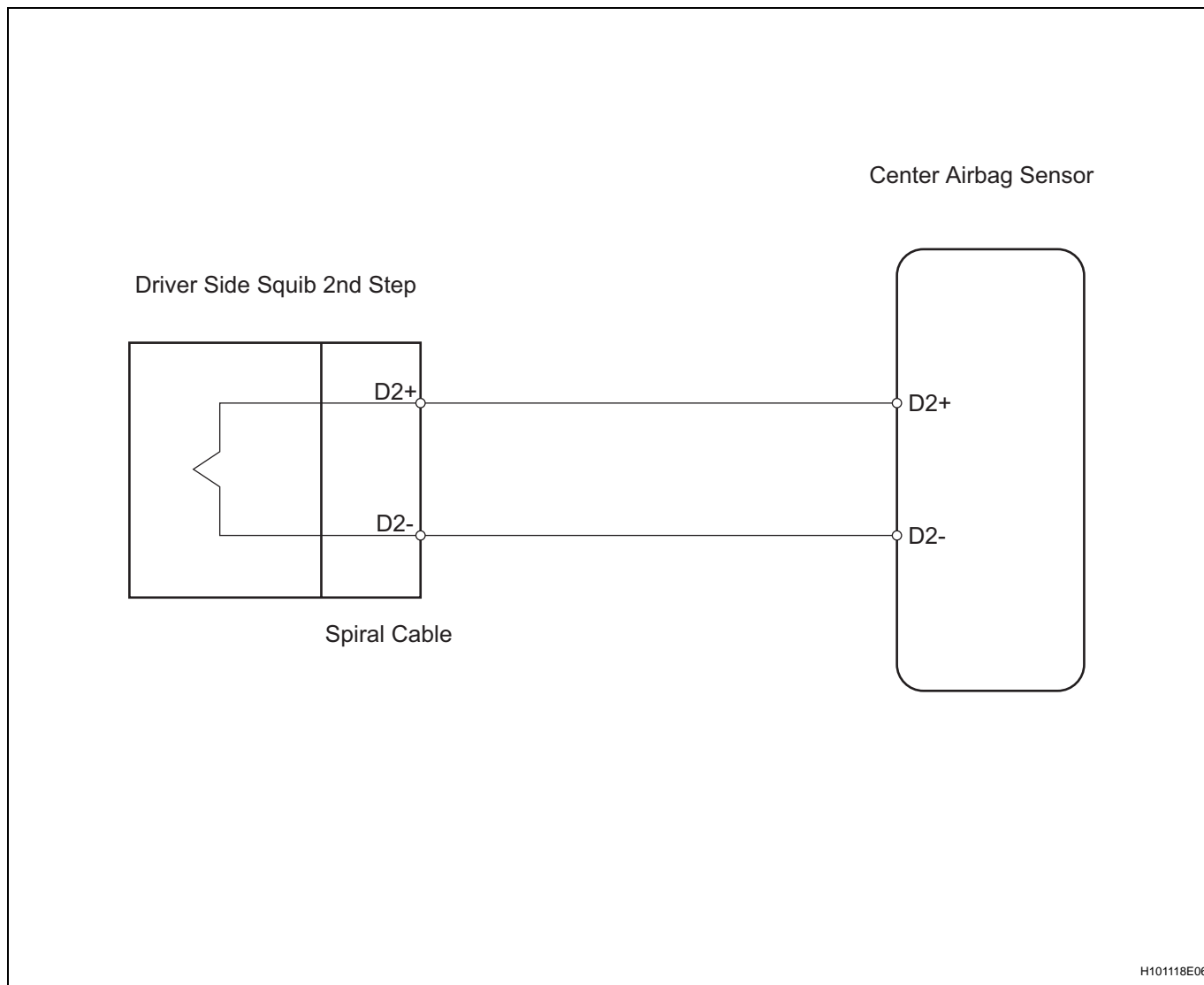
## DESCRIPTION

The driver side squib 2nd step circuit consists of the center airbag sensor, the spiral cable and the steering pad.

The circuit instructs the SRS to deploy when the deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the driver side squib 2nd step circuit.

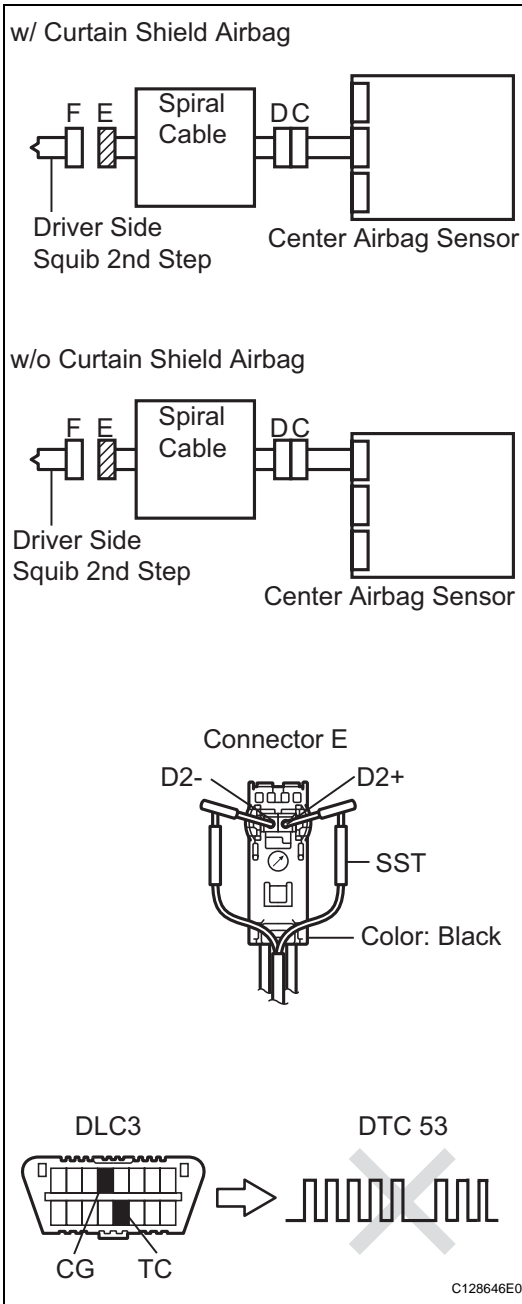
<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1810/53	Center airbag sensor receives a line short signal 5 times in the driver side squib 2nd step circuit during primary check.	<ul style="list-style-type: none"> <li>• Instrument panel wire</li> <li>• Spiral cable</li> <li>• Steering pad (Driver side squib 2nd step)</li> <li>• Center airbag sensor</li> </ul>
B1811/53	Center airbag sensor receives an open signal in the driver side squib 2nd step circuit for 2 seconds.	<ul style="list-style-type: none"> <li>• Instrument panel wire</li> <li>• Spiral cable</li> <li>• Steering pad (Driver side squib 2nd step)</li> <li>• Center airbag sensor</li> </ul>
B1812/53	Center airbag sensor assembly receives a short circuit to ground signal in the driver side 2nd step circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>• Instrument panel wire</li> <li>• Spiral cable</li> <li>• Steering pad (Driver side squib 2nd step)</li> <li>• Center airbag sensor</li> </ul>
B1813/53	Center airbag sensor assembly receives a short circuit to B+ signal in the driver side squib 2nd step circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>• Instrument panel wire</li> <li>• Spiral cable</li> <li>• Steering pad (Driver side squib 2nd step)</li> <li>• Center airbag sensor</li> </ul>

**WIRING DIAGRAM****INSPECTION PROCEDURE****HINT:**

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

## 1

## CHECK STEERING PAD (DRIVER SIDE SQUIB 2ND STEP)



NG

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Disconnect the connectors from the steering pad.
- Connect the white wire side of SST to the spiral cable connector E.

**CAUTION:**

**Never connect a tester to the steering pad (driver side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.**

**NOTICE:**

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

**SST 09843-18060**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**OK:**

**DTC B1810, B1811, B1812, B1813 or 53 is not output.**

**HINT:**

DTCs other than DTC B1810, B1811, B1812, B1813 or 53 may be output at this time, but they are not related to this check.

OK

REPLACE STEERING PAD

## 2

## CHECK CONNECTOR

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Disconnect SST from the spiral cable.
- Check that the spiral cable connector (on the steering pad side) is not damaged.

RS

OK:  
Lock button is not disengaged, and claw of lock is not deformed or damaged.

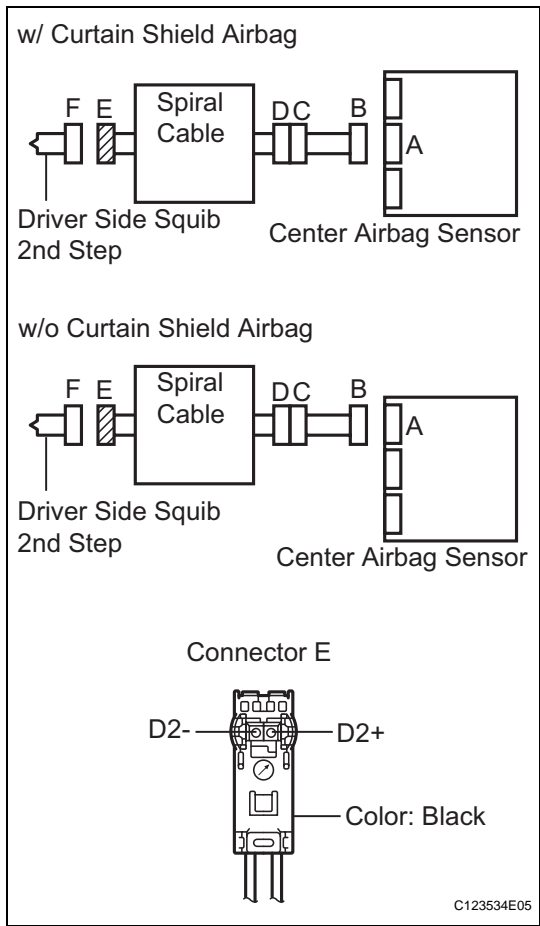
NG

REPLACE SPIRAL CABLE

OK

3

CHECK DRIVER SIDE SQUIB 2ND STEP CIRCUIT



- (a) Disconnect the connector from the center airbag sensor.
  - (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
  - (c) Turn the ignition switch ON.
  - (d) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
D2+ - Body ground	Below 1 V
D2- - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
  - (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
  - (g) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
D2+ - D2-	Below 1 Ω
D2+ - Body ground	1 MΩ or higher
D2- - Body ground	1 MΩ or higher

- (h) Release the activation prevention mechanism built into connector B (see page RS-37).
  - (i) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
D2+ - D2-	1 MΩ or higher

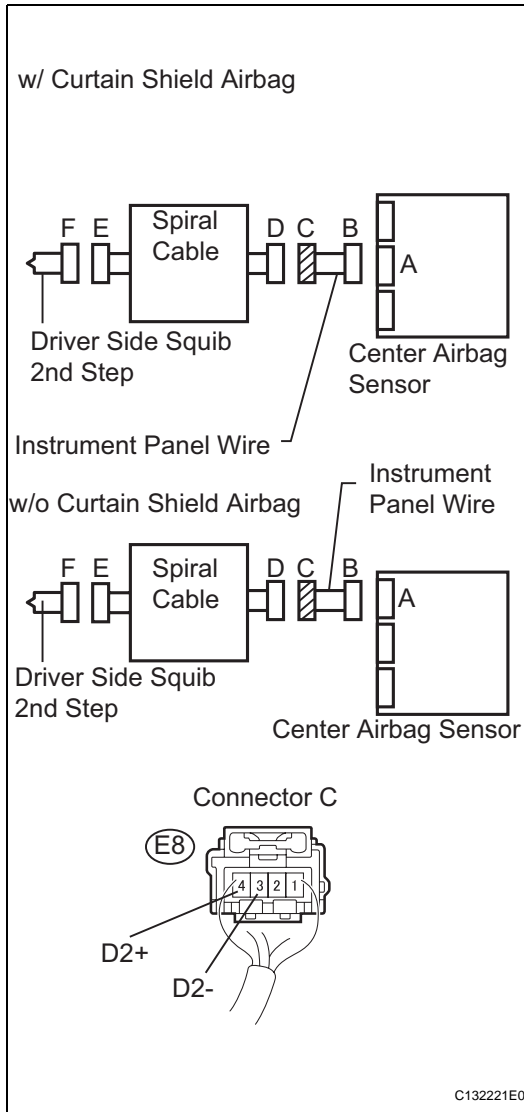
OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

OK

## 4

## CHECK INSTRUMENT PANEL WIRE



- Restore the released activation prevention mechanism of connector B to its original position.
- Disconnect the instrument panel wire connector from the spiral cable.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
E8-4 (D2+) - Body ground	Below 1 V
E8-3 (D2-) - Body ground	Below 1 V

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
E8-4 (D2+) - E8-3 (D2-)	Below 1 $\Omega$
E8-4 (D2+) - Body ground	1 M $\Omega$ or higher
E8-3 (D2-) - Body ground	1 M $\Omega$ or higher

- Release the activation prevention mechanism built into connector B (see page RS-37).
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
E8-4 (D2+) - E8-3 (D2-)	1 M $\Omega$ or higher

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

## REPLACE SPIRAL CABLE

RS

<b>DTC</b>	<b>B1815/54</b>	<b>Short in Front Passenger Side Squib 2nd Step Circuit</b>
<b>DTC</b>	<b>B1816/54</b>	<b>Open in Front Passenger Side Squib 2nd Step Circuit</b>
<b>DTC</b>	<b>B1817/54</b>	<b>Short to GND in Front Passenger Side Squib 2nd Step Circuit</b>
<b>DTC</b>	<b>B1818/54</b>	<b>Short to B+ in Front Passenger Side Squib 2nd Step Circuit</b>

## DESCRIPTION

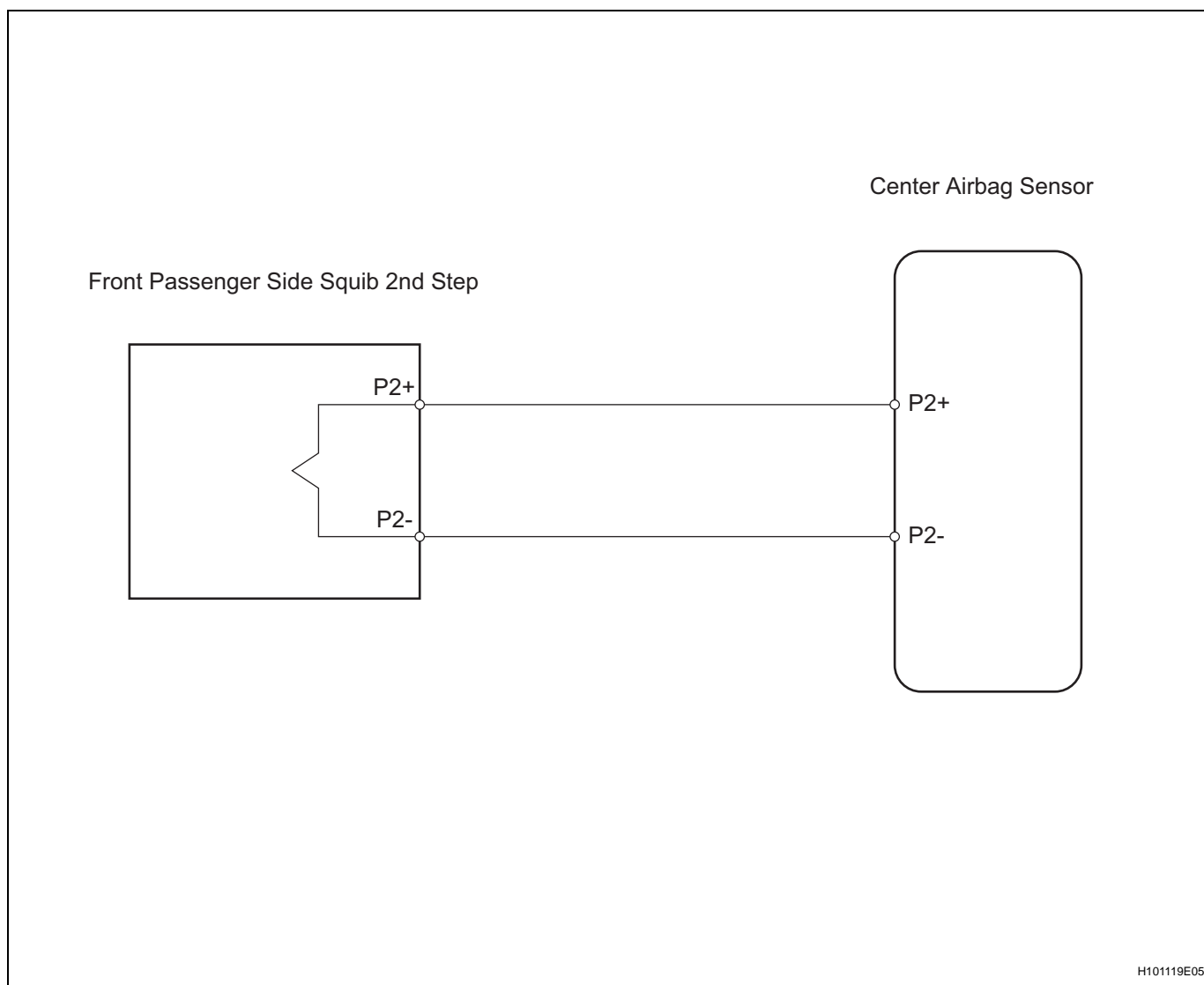
The front passenger side squib 2nd step circuit consists of the center airbag sensor and the front passenger airbag.

The circuit instructs the SRS to deploy when the deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the front passenger side squib 2nd step circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1815/54	Center airbag sensor receives a line short signal 5 times in the front passenger side squib 2nd step circuit during primary check.	<ul style="list-style-type: none"> <li>Instrument panel wire</li> <li>Front passenger airbag (Front passenger side squib 2nd step)</li> <li>Center airbag sensor</li> </ul>
B1816/54	Center airbag sensor receives an open signal in the front passenger side squib 2nd step circuit for 2 seconds.	<ul style="list-style-type: none"> <li>Instrument panel wire</li> <li>Front passenger airbag (Front passenger side squib 2nd step)</li> <li>Center airbag sensor</li> </ul>
B1817/54	Center airbag sensor receives a short to ground signal in the front passenger side squib 2nd step circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>Instrument panel wire</li> <li>Front passenger airbag (Front passenger side squib 2nd step)</li> <li>Center airbag sensor</li> </ul>
B1818/54	Center airbag sensor receives a short to B+ signal in the front passenger side squib 2nd step circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>Instrument panel wire</li> <li>Front passenger airbag (Front passenger side squib 2nd step)</li> <li>Center airbag sensor</li> </ul>



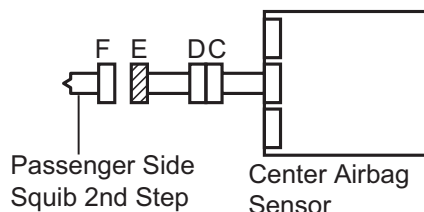
**WIRING DIAGRAM****RS****INSPECTION PROCEDURE****HINT:**

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

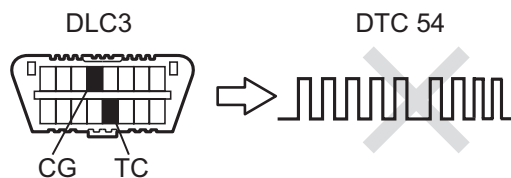
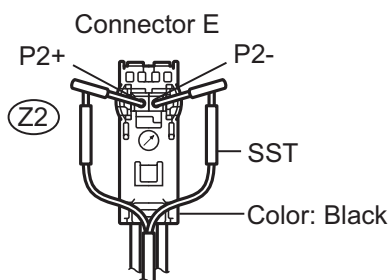
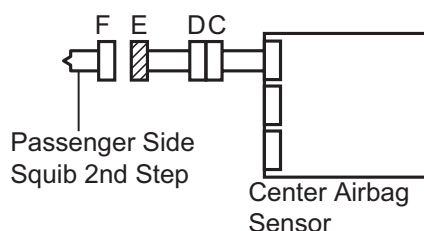
1

**CHECK FRONT PASSENGER AIRBAG ASSEMBLY (FRONT PASSENGER SIDE SQUIB 2ND STEP)**

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



C128648E04

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Disconnect the connector from the front passenger airbag.
- Connect the white wire side of SST to the instrument panel wire connector E.

**CAUTION:**

**Never connect a tester to the front passenger airbag (front passenger side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.**

**NOTICE:**

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

**SST 09843-18060**

- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Clear the DTCs (see page RS-49).
- Turn the ignition switch OFF.
- Turn the ignition switch ON, and wait for at least 60 seconds.
- Check the DTCs (see page RS-49).

**OK:**

**DTC B1815, B1816, B1817, B1818 or 54 is not output.**

**HINT:**

DTCs other than DTC B1815, B1816, B1817, B1818 and 54 may be output at this time, but they are not related to this check.

**OK**

**REPLACE FRONT PASSENGER AIRBAG ASSEMBLY**

**NG**

2

**CHECK CONNECTOR**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Disconnect SST (resistance 2.1 Ω) from the instrument panel wire.
- Check that the instrument panel wire connectors (on the front passenger side airbag) are not damaged.

OK:

Lock button is not disengaged, and claw of lock is not deformed or damaged.

NG

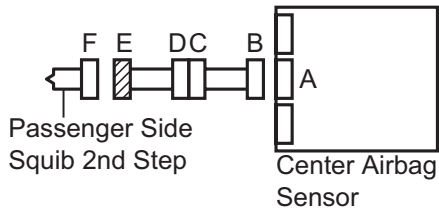
REPLACE INSTRUMENT PANEL WIRE

OK

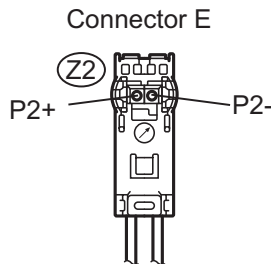
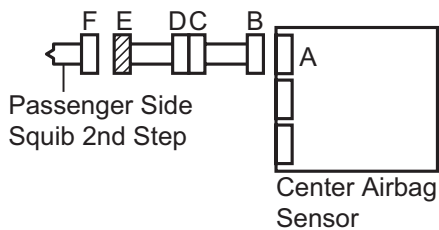
3

## CHECK INSTRUMENT PANEL WIRE

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



C128642E04

- Disconnect the connector from the center airbag sensor.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
Z2-2 (P2+) - Body ground	Below 1 V
Z2-1 (P2-) - Body ground	Below 1 V

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
Z2-2 (P2+) - Z2-1 (P2-)	Below 1 $\Omega$
Z2-2 (P2+) - Body ground	1 M $\Omega$ or higher
Z2-1 (P2-) - Body ground	1 M $\Omega$ or higher

- Release the activation prevention mechanism built into connector B (see page RS-37).
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
Z2-2 (P2+) - Z2-1 (P2-)	1 M $\Omega$ or higher

OK

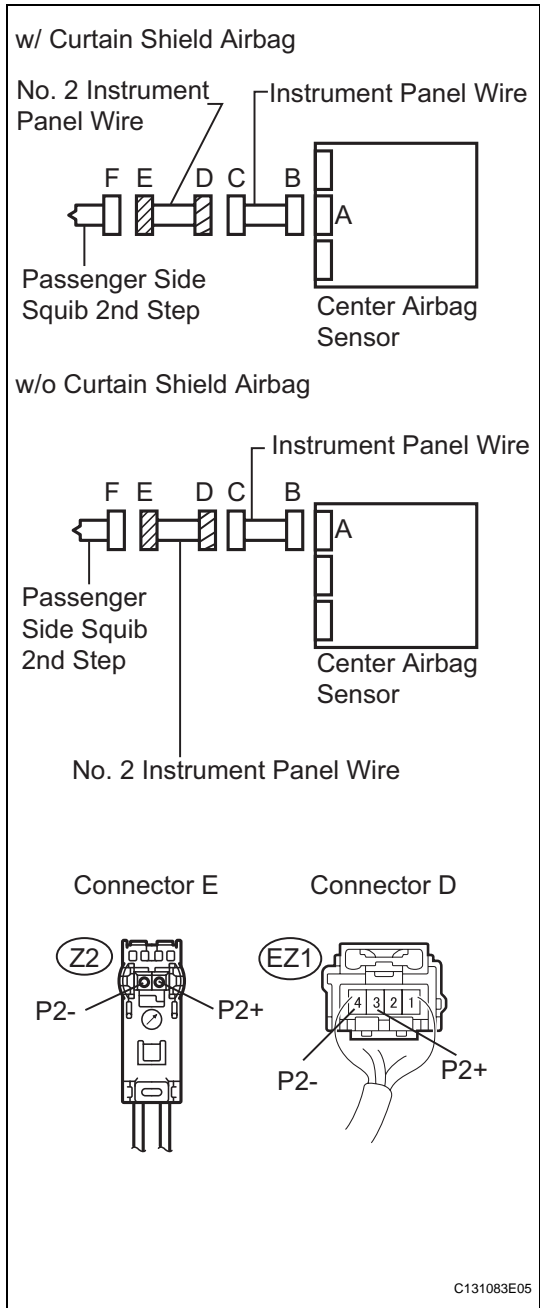
REPLACE CENTER AIRBAG SENSOR ASSEMBLY

NG

RS

4

CHECK NO. 2 INSTRUMENT PANEL WIRE



- (a) Disconnect the No. 2 instrument panel wire connector from the instrument panel wire.
  - (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
  - (c) Turn the ignition switch ON.
  - (d) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
Z2-2 (P2+) - Body ground	Below 1 V
Z2-1 (P2-) - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
  - (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
  - (g) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
Z2-2 (P2+) - EZ1-3	Below 1 Ω
Z2-1 (P2-) - EZ1-4	Below 1 Ω
Z2-2 (P2+) - Z2-1 (P2-)	Below 1 Ω
Z2-2 (P2+) - Body ground	1 MΩ or higher
Z2-1 (P2-) - Body ground	1 MΩ or higher

NG

REPAIR OR REPLACE NO. 2 INSTRUMENT PANEL WIRE

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

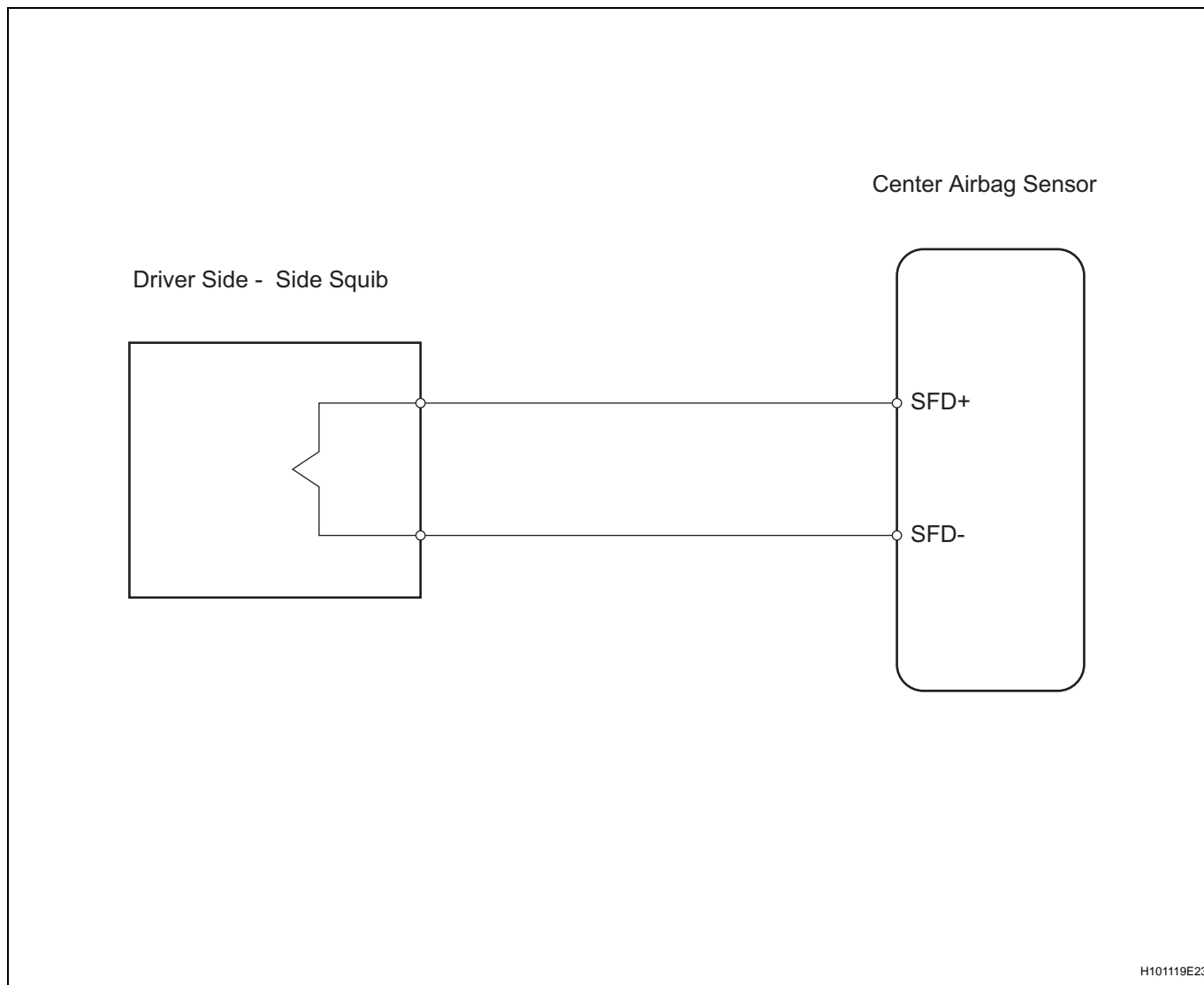
<b>DTC</b>	<b>B1820/55</b>	<b>Short in Front Driver Side - Side Squib Circuit</b>
<b>DTC</b>	<b>B1821/55</b>	<b>Open in Front Driver Side - Side Squib Circuit</b>
<b>DTC</b>	<b>B1822/55</b>	<b>Short to GND in Front Driver Side - Side Squib Circuit</b>
<b>DTC</b>	<b>B1823/55</b>	<b>Short to B+ in Front Driver Side - Side Squib Circuit</b>

## DESCRIPTION

The driver side - side squib circuit consists of the center airbag sensor and the front seat side airbag LH. This circuit instructs the SRS to deploy when the deployment conditions are met.

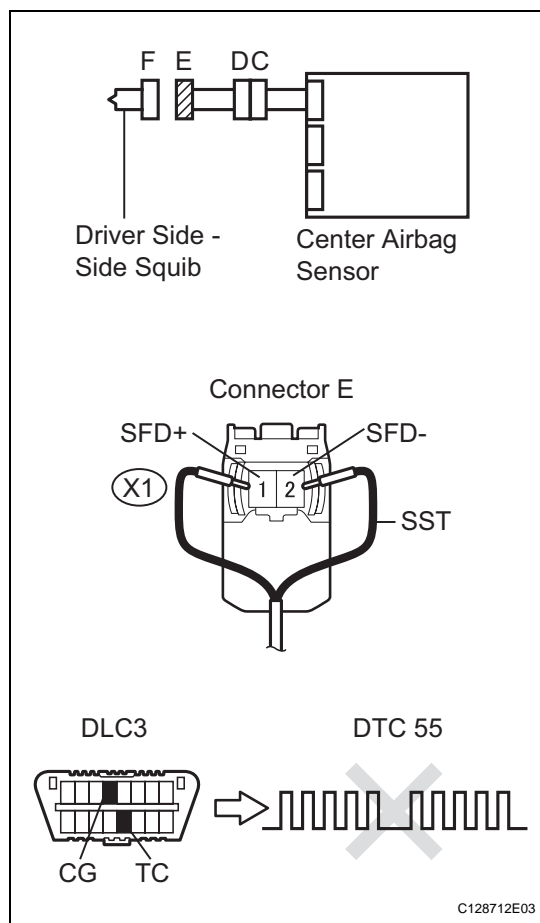
These DTCs are recorded when a malfunction is detected in the driver side - side squib circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1820/55	Center airbag sensor receives a line short signal 5 times in the driver side - side squib circuit during primary check.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>No. 1 seat airbag wire</li> <li>Front seat side airbag LH (Driver side - side squib)</li> <li>Center airbag sensor</li> </ul>
B1821/55	Center airbag sensor receives an open signal in the driver side - side squib circuit for 2 seconds.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>No. 1 seat airbag wire</li> <li>Front seat side airbag LH (Driver side - side squib)</li> <li>Center airbag sensor</li> </ul>
B1822/55	Center airbag sensor receives a short to ground signal in the driver side - side squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>No. 1 seat airbag wire</li> <li>Front seat side airbag LH (Driver side - side squib)</li> <li>Center airbag sensor</li> </ul>
B1823/55	Center airbag sensor receives a short to B+ signal in the driver side - side squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>No. 1 seat airbag wire</li> <li>Front seat side airbag LH (Driver side - side squib)</li> <li>Center airbag sensor</li> </ul>

**WIRING DIAGRAM****INSPECTION PROCEDURE****HINT:**

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

# 1 CHECK FRONT SEAT SIDE AIRBAG ASSEMBLY LH (DRIVER SIDE - SIDE SQUIB)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connector from the front seat side airbag LH.
- (d) Connect the black wire side of SST to connector E.

## CAUTION:

**Never connect a tester to the front seat side airbag LH (driver side - side squib) for measurement, as this may lead to a serious injury due to airbag deployment.**

## NOTICE:

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

## SST 09843-18060

- (e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (f) Turn the ignition switch ON, and wait for at least 60 seconds.
- (g) Clear the DTCs (see page RS-49).
- (h) Turn the ignition switch OFF.
- (i) Turn the ignition switch ON, and wait for at least 60 seconds.
- (j) Check the DTCs (see page RS-49).

## OK:

**DTC B1820, B1821, B1822, B1823 or 55 is not output.**

## HINT:

DTCs other than DTC B1820, B1821, B1822, B1823 or 55 may be output at this time, but they are not related to this check.

OK

REPLACE FRONT SEAT ASSEMBLY LH

NG

# 2 CHECK CONNECTOR

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect SST from the No. 1 seat airbag wire.
- (d) Check that the floor wire connectors (on the driver side - side squib) are not damaged.

## OK:

**Lock button is not disengaged, and claw of lock is not deformed or damaged.**

NG

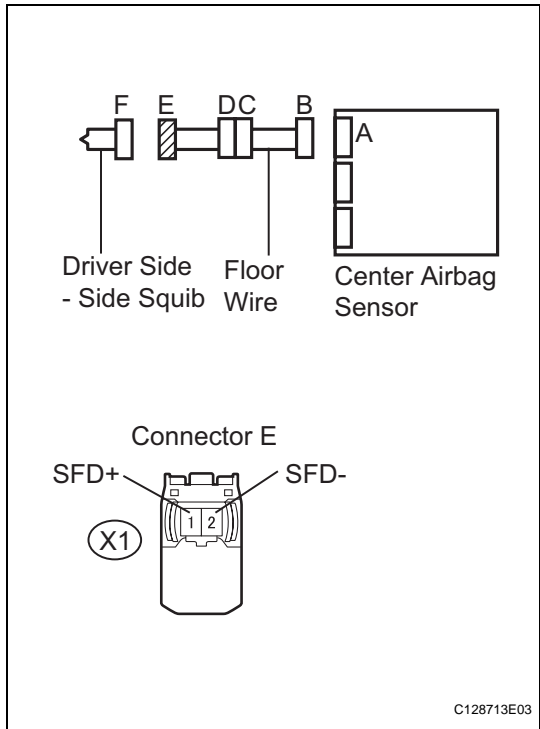
REPLACE FLOOR WIRE

RS

OK

3

CHECK FLOOR WIRE (DRIVER SIDE - SIDE SQUIB CIRCUIT)



- (a) Disconnect the connector from the center airbag sensor.
  - (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
  - (c) Turn the ignition switch ON.
  - (d) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
X1-1 (SFD-) - Body ground	Below 1 V
X1-2 (SFD+) - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
  - (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
  - (g) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
X1-1 (SFD-) - X1-2 (SFD+)	Below 1 Ω
X1-1 (SFL-) - Body ground	1 MΩ or higher
X1-2 (SFL+) - Body ground	1 MΩ or higher

- (h) Release the activation prevention mechanism built into connector B (see page RS-37).
  - (i) Measure the resistance of the wire harness side connector.
- Standard resistance**

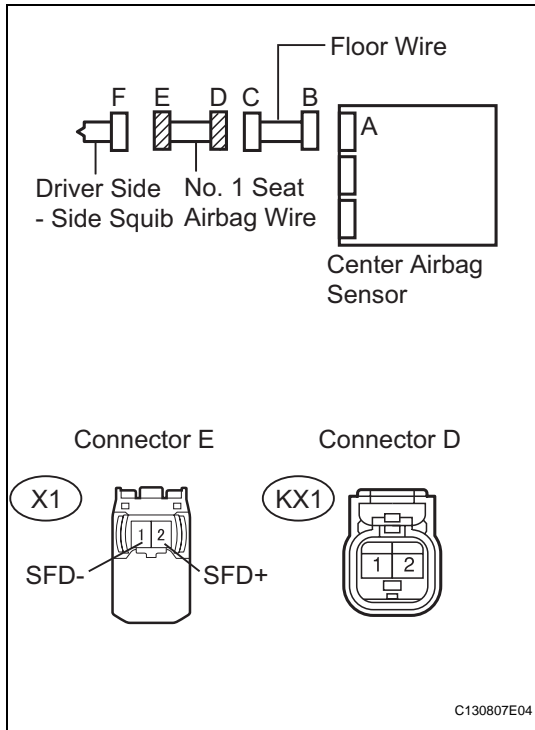
Tester Connection	Specified Condition
X1-1 (SFD-) - X1-2 (SFD+)	1 MΩ or higher

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

NG



**4 CHECK NO. 1 SEAT AIRBAG WIRE**

- Disconnect the No. 1 seat airbag wire connector from the floor wire.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
X1-1 (SFD-) - Body ground	Below 1 V
X1-2 (SFD+) - Body ground	Below 1 V

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
X1-2 (SFD+) - KX1-2	Below 1 $\Omega$
X1-1 (SFD-) - KX1-1	Below 1 $\Omega$
X1-2 (SFD+) - X1-1 (SFD-)	1 M $\Omega$ or higher
X1-2 (SFD+) - Body ground	1 M $\Omega$ or higher
X1-1 (SFD-) - Body ground	1 M $\Omega$ or higher

**NG****REPAIR OR REPLACE NO. 1 SEAT AIRBAG WIRE****OK****RS****REPAIR OR REPLACE FLOOR WIRE**

<b>DTC</b>	<b>B1825/56</b>	<b>Short in Front Passenger Side - Side Squib Circuit</b>
<b>DTC</b>	<b>B1826/56</b>	<b>Open in Front Passenger Side - Side Squib Circuit</b>
<b>DTC</b>	<b>B1827/56</b>	<b>Short to GND in Front Passenger Side - Side Squib Circuit</b>
<b>DTC</b>	<b>B1828/56</b>	<b>Short to B+ in Front Passenger Side - Side Squib Circuit</b>

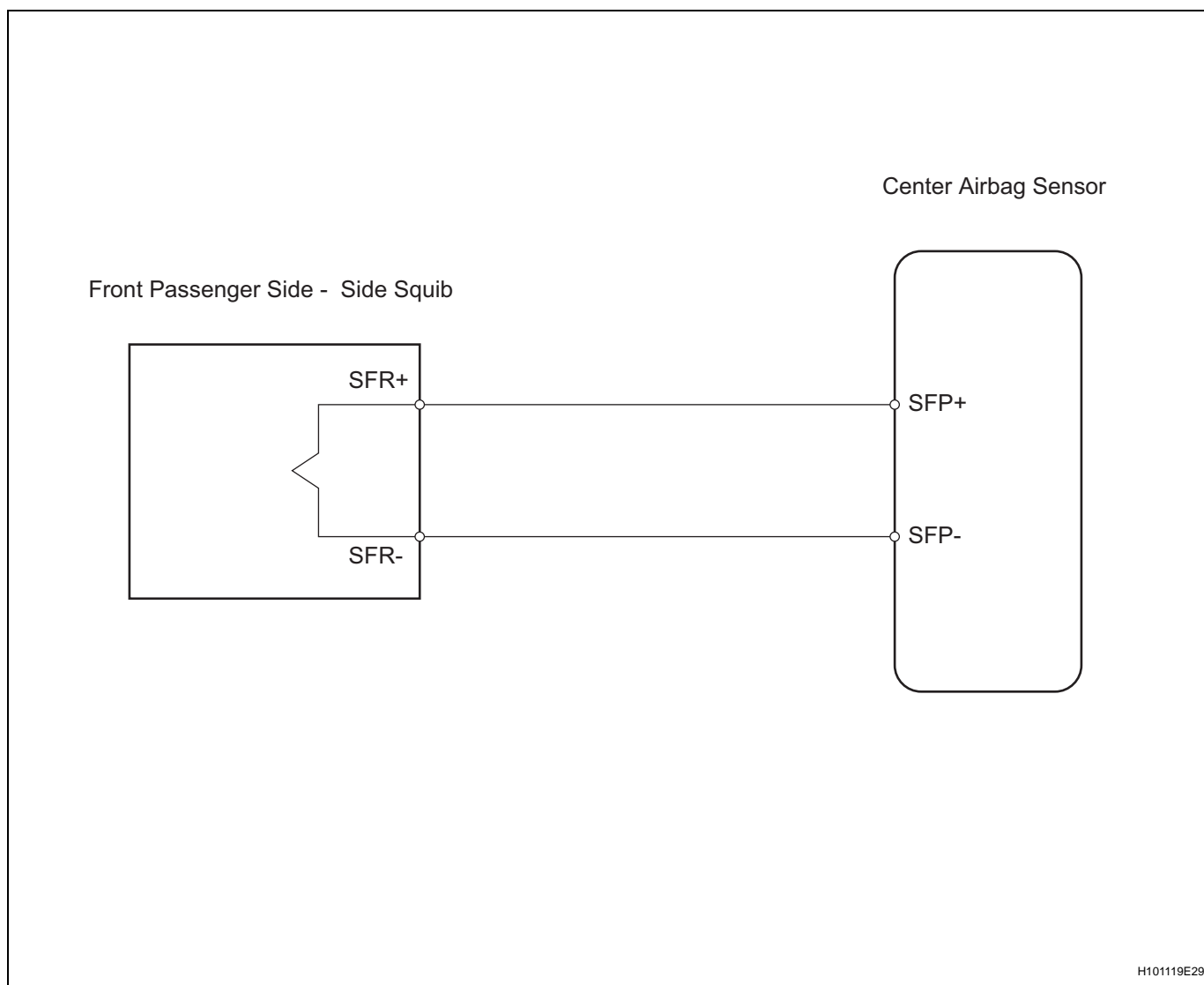
## DESCRIPTION

The front passenger side - side squib circuit consists of the center airbag sensor and the front seat side airbag RH.

The circuit instructs the SRS to deploy when the deployment conditions are met.

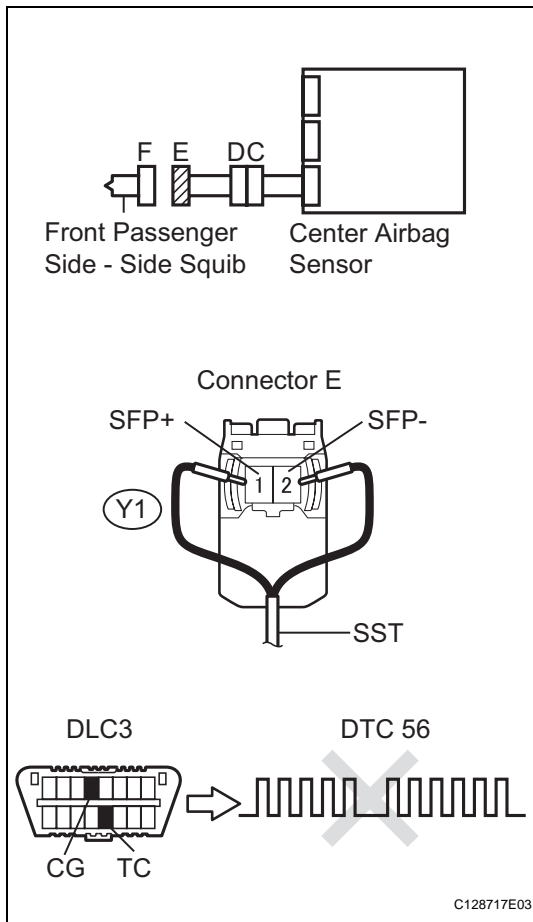
These DTCs are recorded when a malfunction is detected in the front passenger side - side squib circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1825/56	The center airbag sensor receives a line short signal 5 times in the front passenger side - side squib circuit during primary check.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>No. 2 seat airbag wire</li> <li>Front seat side airbag RH (Front passenger side - side squib)</li> <li>Center airbag sensor</li> </ul>
B1826/56	Center airbag sensor receives an open signal in the front passenger side - side squib circuit for 2 seconds.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>No. 2 seat airbag wire</li> <li>Front seat side airbag RH (Front passenger side - side squib)</li> <li>Center airbag sensor</li> </ul>
B1827/56	Center airbag sensor receives a short to ground signal in the front passenger side - side squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>No. 2 seat airbag wire</li> <li>Front seat side airbag RH (Front passenger side - side squib)</li> <li>Center airbag sensor</li> </ul>
B1828/56	Center airbag sensor receives a short to B+ signal in the front passenger side - side squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>No. 2 seat airbag wire</li> <li>Front seat side airbag RH (Front passenger side - side squib)</li> <li>Center airbag sensor</li> </ul>

**WIRING DIAGRAM****INSPECTION PROCEDURE****HINT:**

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

1

**CHECK FRONT SEAT SIDE AIRBAG ASSEMBLY RH (FRONT PASSENGER SIDE - SIDE SQUIB)**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connector from the front seat side airbag RH.
- (d) Connect the black wire side of SST to connector C.

**CAUTION:**

**Never connect a tester to the front seat side airbag RH (front passenger side - side squib) for measurement, as this may lead to a serious injury due to airbag deployment.**

**NOTICE:**

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

**SST 09843-18060**

- (e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (f) Turn the ignition switch ON, and wait for at least 60 seconds.
- (g) Clear the DTCs (see page RS-49).
- (h) Turn the ignition switch OFF.
- (i) Turn the ignition switch ON, and wait for at least 60 seconds.
- (j) Check the DTCs (see page RS-49).

**OK:**

**DTC B1825, B1826, B1827, B1828 or 56 is not output.**

**HINT:**

DTCs other than DTC B1825, B1826, B1827, B1828 or 56 may be output at this time, but they are not related to this check.

OK

**REPLACE FRONT SEAT ASSEMBLY RH**

NG

2

**CHECK CONNECTOR**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect SST from connector E.
- (d) Check that the No. 2 seat airbag wire connectors (on the front passenger side - side squib) are not damaged.

**OK:**

**Lock button is not disengaged, and claw of lock is not deformed or damaged.**

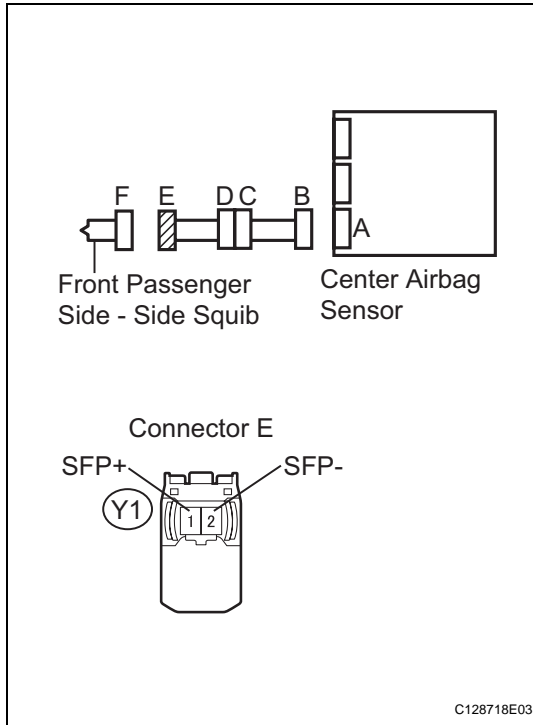
NG

REPLACE FLOOR WIRE NO.2

OK

3

## CHECK NO. 2 FLOOR WIRE (FRONT PASSENGER SIDE - SIDE SQUIB CIRCUIT)



- (a) Disconnect the connector from the center airbag sensor.
  - (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
  - (c) Turn the ignition switch ON.
  - (d) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
Y1-1 (SFP+) - Body ground	Below 1 V
Y1-2 (SFP-) - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
  - (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
  - (g) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
Y1-1 (SFP+) - Y1-2 (SFP-)	Below 1 $\Omega$
Y1-1 (SFP+) - Body ground	1 M $\Omega$ or higher
Y1-2 (SFP-) - Body ground	1 M $\Omega$ or higher

- (h) Release the activation prevention mechanism built into connector B (see page RS-37).
  - (i) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
Y1-1 (SFP+) - Y1-2 (SFP-)	1 M $\Omega$ or higher

OK

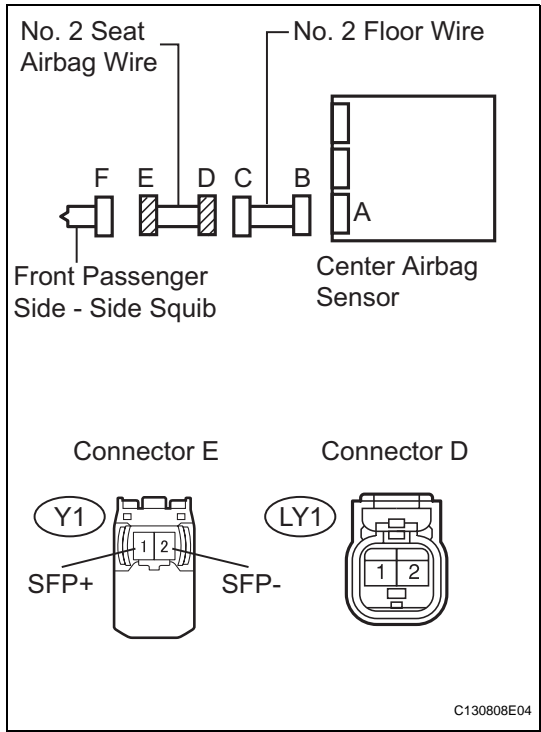
REPLACE CENTER AIRBAG SENSOR ASSEMBLY

NG

RS

4

CHECK NO. 2 SEAT AIRBAG WIRE



- (a) Disconnect the No. 2 seat airbag wire from the No. 2 floor wire.
  - (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
  - (c) Turn the ignition switch OFF.
  - (d) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
Y1-1 (SFP+) - Body ground	Below 1 V
Y1-2 (SFP-) - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
  - (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
  - (g) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
Y1-1 (SFP+) - LY1-1	Below 1 $\Omega$
Y1-2 (SFP-) - LY1-2	Below 1 $\Omega$
Y1-1 (SFP+) - Y1-2 (SFP-)	1 M $\Omega$ or higher
Y1-1 (SFP+) - Body ground	1 M $\Omega$ or higher
Y1-2 (SFP-) - Body ground	1 M $\Omega$ or higher

NG

REPAIR OR REPLACE NO. 2 SEAT AIRBAG WIRE

RS

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

<b>DTC</b>	<b>B1830/57</b>	<b>Short in Driver Side Curtain Shield Squib Circuit</b>
<b>DTC</b>	<b>B1831/57</b>	<b>Open in Driver Side Curtain Shield Squib Circuit</b>
<b>DTC</b>	<b>B1832/57</b>	<b>Short to GND in Driver Side Curtain Shield Squib Circuit</b>
<b>DTC</b>	<b>B1833/57</b>	<b>Short to B+ in Driver Side Curtain Shield Squib Circuit</b>

## DESCRIPTION

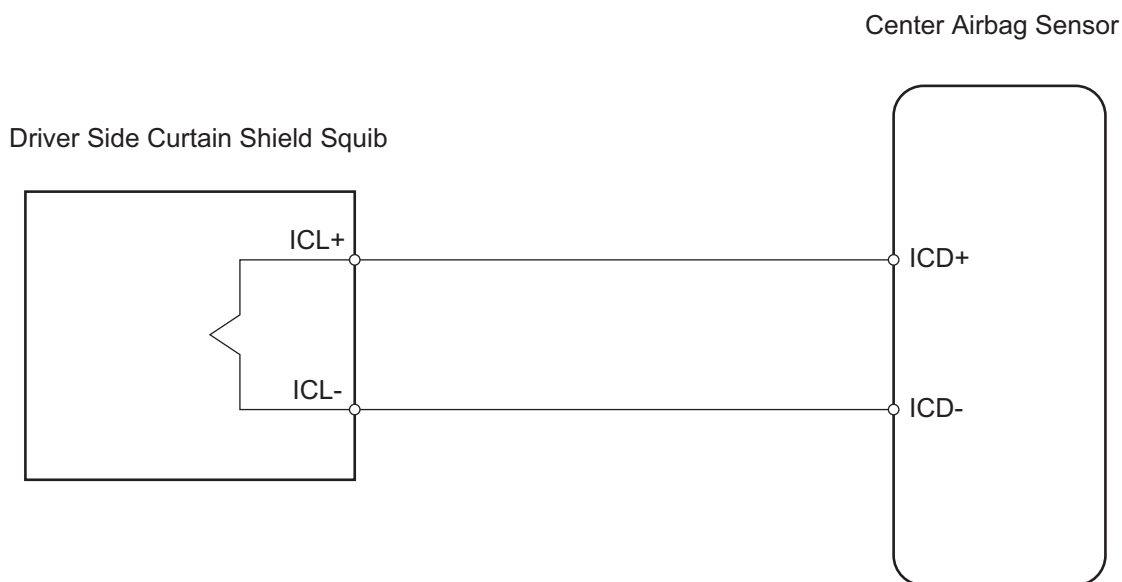
The driver side curtain shield squib circuit consists of the center airbag sensor and the curtain shield airbag LH.

The circuit instructs the SRS to deploy when the deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the driver side curtain shield squib circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1830/57	Center airbag sensor receives a line short signal 5 times in the driver side curtain shield squib circuit during primary check.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Curtain shield airbag LH (Driver side curtain shield squib)</li> <li>Center airbag sensor</li> </ul>
B1831/57	Center airbag sensor receives an open signal in the driver side curtain shield squib circuit for 2 seconds.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Curtain shield airbag LH (Driver side curtain shield squib)</li> <li>Center airbag sensor</li> </ul>
B1832/57	Center airbag sensor receives a short to ground signal in the driver side curtain shield squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Curtain shield airbag LH (Driver side curtain shield squib)</li> <li>Center airbag sensor</li> </ul>
B1833/57	Center airbag sensor receives a short to B+ signal in the driver side curtain shield squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Curtain shield airbag LH (Driver side curtain shield squib)</li> <li>Center airbag sensor</li> </ul>

## WIRING DIAGRAM



RS

H101119E36

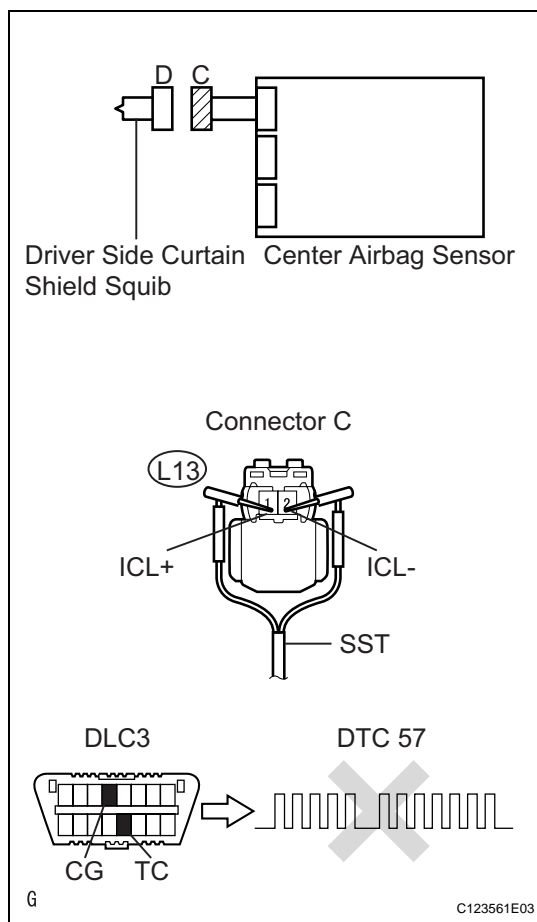
## INSPECTION PROCEDURE

## HINT:

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-49](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-49](#)).



# 1 CHECK CURTAIN SHIELD AIRBAG ASSEMBLY LH (DRIVER SIDE CURTAIN SHIELD SQUIB)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connector from the curtain shield airbag LH.
- (d) Connect the white wire side of SST (resistance 2.1  $\Omega$ ) to connector C.

## CAUTION:

**Never connect a tester to the curtain shield airbag LH (driver side curtain shield squib) for measurement, as this may lead to a serious injury due to airbag deployment.**

## NOTICE:

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

## SST 09843-18060

- (e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (f) Turn the ignition switch ON, and wait for at least 60 seconds.
- (g) Clear the DTCs (see page RS-49).
- (h) Turn the ignition switch OFF.
- (i) Turn the ignition switch ON, and wait for at least 60 seconds.
- (j) Check the DTCs (see page RS-49).

## OK:

**DTC B1830, B1831, B1832, B1833 or 57 is not output.**

## HINT:

DTCs other than DTC B1830, B1831, B1832, B1833 or 57 may be output at this time, but they are not related to this check.

OK

**REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH**

NG

# 2 CHECK CONNECTOR

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect SST from connector C.
- (d) Check that the floor wire connector (on the curtain shield LH side) is not damaged.

RS

OK:  
Lock button is not disengaged, and claw of lock is not deformed or damaged.

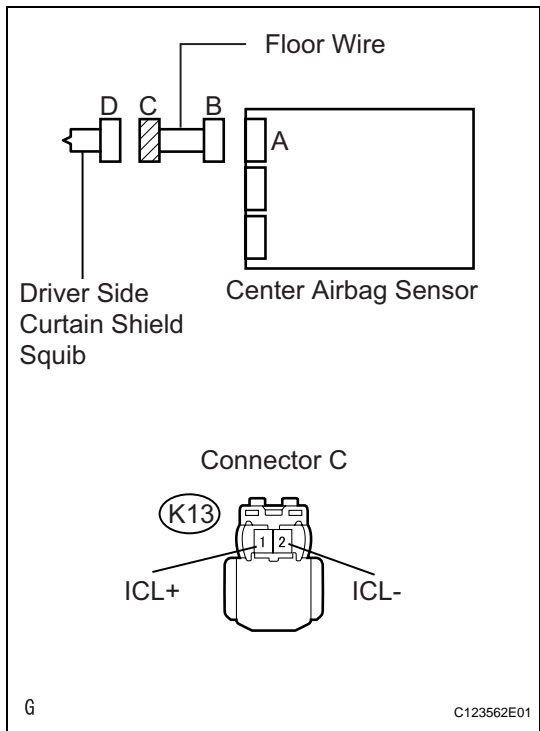
NG

REPAIR OR REPLACE FLOOR WIRE

OK

3

CHECK FLOOR WIRE (DRIVER SIDE CURTAIN SHIELD SQUIB CIRCUIT)



- (a) Disconnect the connector from the center airbag sensor.
  - (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
  - (c) Turn the ignition switch ON.
  - (d) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
K13-1 (ICL+) - Body ground	Below 1 V
K13-2 (ICL-) - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
  - (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
  - (g) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
K13-1 (ICL+) - K13-2 (ICL-)	Below 1 Ω
K13-1 (ICL+) - Body ground	1 MΩ or higher
K13-2 (ICL-) - Body ground	1 MΩ or higher

- (h) Release the activation prevention mechanism built into connector B (see page RS-37).
  - (i) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
K13-1 (ICL+) - K13-2 (ICL-)	1 MΩ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

<b>DTC</b>	<b>B1835/58</b>	<b>Short in Front Passenger Side Curtain Shield Squib Circuit</b>
<b>DTC</b>	<b>B1836/58</b>	<b>Open in Front Passenger Side Curtain Shield Squib Circuit</b>
<b>DTC</b>	<b>B1837/58</b>	<b>Short to GND in Front Passenger Side Curtain Shield Squib Circuit</b>
<b>DTC</b>	<b>B1838/58</b>	<b>Short to B+ in Front Passenger Side Curtain Shield Squib Circuit</b>

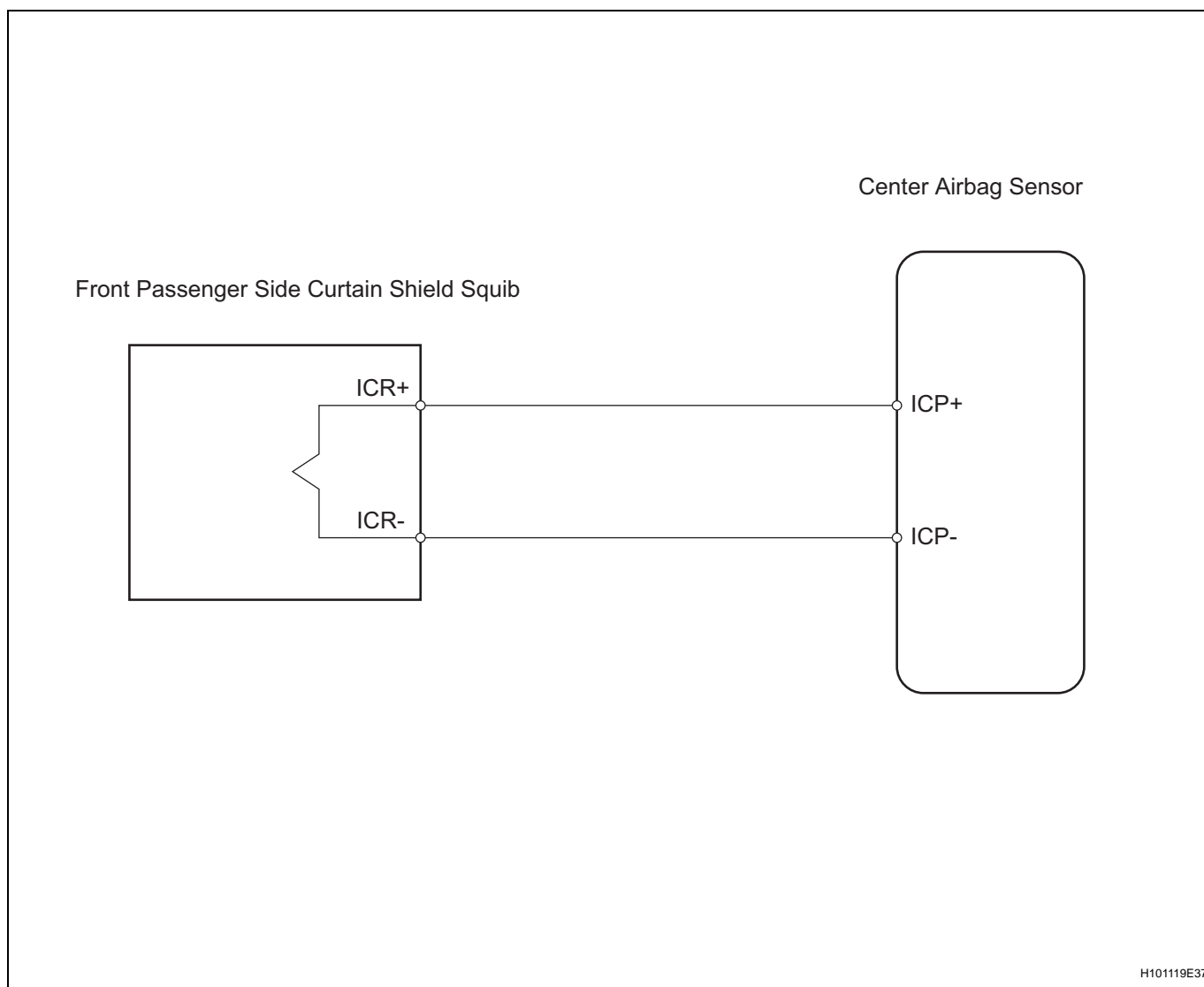
## DESCRIPTION

The front passenger side curtain shield squib circuit consists of the center airbag sensor and the curtain shield airbag RH.

The circuit instructs the SRS to deploy when the deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the front passenger side curtain shield squib circuit.

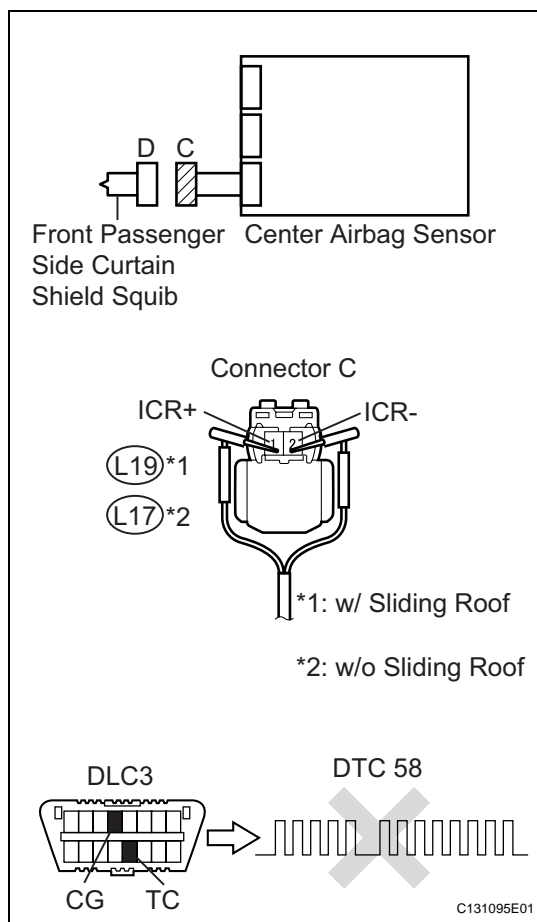
<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1835/58	Center airbag sensor receives a line short circuit signal 5 times in the front passenger side curtain shield squib circuit during primary check.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Curtain shield airbag RH (Front passenger side curtain shield squib)</li> <li>Center airbag sensor</li> </ul>
B1836/58	Center airbag sensor receives an open signal in the front passenger side curtain shield squib circuit for 2 seconds.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Curtain shield airbag RH (Front passenger side curtain shield squib)</li> <li>Center airbag sensor</li> </ul>
B1837/58	Center airbag sensor receives a short to ground signal in the front passenger side curtain shield squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Curtain shield airbag RH (Front passenger side curtain shield squib)</li> <li>Center airbag sensor</li> </ul>
B1838/58	Center airbag sensor receives a short to B+ signal in the front passenger side curtain shield squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Curtain shield airbag RH (Front passenger side curtain shield squib)</li> <li>Center airbag sensor</li> </ul>

**WIRING DIAGRAM****INSPECTION PROCEDURE****HINT:**

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

## 1

## CHECK CURTAIN SHIELD AIRBAG ASSEMBLY RH (FRONT PASSENGER SIDE CURTAIN SHIELD SQUIB)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connectors from the curtain shield airbag RH.
- (d) Connect the white wire side of SST to connector C.

**CAUTION:**

**Never connect a tester to the curtain shield airbag RH (front passenger side curtain shield squib) for measurement, as this may lead to a serious injury due to airbag deployment.**

**NOTICE:**

- **Do not forcibly insert SST into the terminals of the connector when connecting.**
- **Insert SST straight into the terminals of the connector.**

**SST 09843-18060**

- (e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (f) Turn the ignition switch ON, and wait for at least 60 seconds.
- (g) Clear the DTCs (see page [RS-49](#)).
- (h) Turn the ignition switch OFF.
- (i) Turn the ignition switch ON, and wait for at least 60 seconds.
- (j) Check the DTCs (see page [RS-49](#)).

**OK:**

**DTC B1835, B1836, B1837, B1838 or 58 is not output.**

HINT:

DTCs other than DTC B1835, B1836, B1837, B1838 or 58 may be output at this time, but they are not related to this check.

OK

## REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH

**NG**

## 2

## CHECK CONNECTOR

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect SST from connector C.
- (d) Check that the floor wire connector (on the curtain shield airbag RH side) is not damaged.

**OK:**

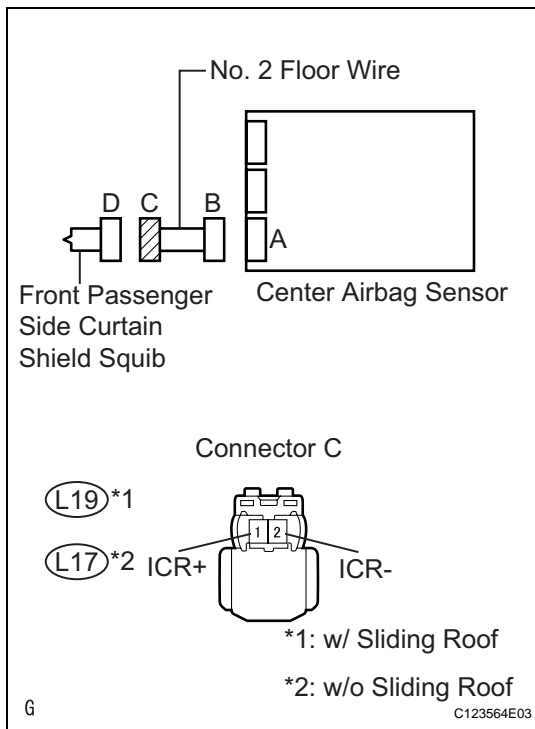
Lock button is not disengaged, and claw of lock is not deformed or damaged.

NG

REPAIR OR REPLACE FLOOR WIRE

OK

3

**CHECK FLOOR WIRE NO.2 (FRONT PASSENGER SIDE CURTAIN SHIELD SQUIB CIRCUIT)**

- (a) Disconnect the connectors from the center airbag sensor.
- (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (c) Turn the ignition switch ON.
- (d) Measure the voltage of the wire harness side connector.

**Standard voltage:**  
**w/ Sliding Roof**

Tester Connection	Specified Condition
L19-1 (ICR+) - Body ground	Below 1 V
L19-2 (ICR-) - Body ground	Below 1 V

**w/o Sliding Roof**

Tester Connection	Specified Condition
L17-1 (ICR+) - Body ground	Below 1 V
L17-2 (ICR-) - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
- (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (g) Measure the resistance of the wire harness side connector.

**Standard resistance:**  
**w/ Sliding Roof**

Tester Connection	Specified Condition
L19-1 (ICR+) - L19-2 (ICR-)	Below 1 $\Omega$
L19-1 (ICR+) - Body ground	1 M $\Omega$ or higher
L19-2 (ICR-) - Body ground	1 M $\Omega$ or higher

**w/o Sliding Roof**

Tester Connection	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	Below 1 $\Omega$
L17-1 (ICR+) - Body ground	1 M $\Omega$ or higher
L17-2 (ICR-) - Body ground	1 M $\Omega$ or higher

- (h) Release the activation prevention mechanism built into connector B (see page RS-37).
- (i) Measure the resistance of the wire harness side connector.

**Standard resistance:**  
**w/ Sliding Roof**

Tester Connection	Specified Condition
L19-1 (ICR+) - L19-2 (ICR-)	1 M $\Omega$ or higher

**w/o Sliding Roof**

Tester Connection	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	1 M $\Omega$ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

<b>DTC</b>	<b>B1900/73</b>	<b>Short in Front Driver Side Pretensioner Squib Circuit</b>
<b>DTC</b>	<b>B1901/73</b>	<b>Open in Front Driver Side Pretensioner Squib Circuit</b>
<b>DTC</b>	<b>B1902/73</b>	<b>Short to GND in Front Driver Side Pretensioner Squib Circuit</b>
<b>DTC</b>	<b>B1903/73</b>	<b>Short to B+ in Front Driver Side Pretensioner Squib Circuit</b>

## DESCRIPTION

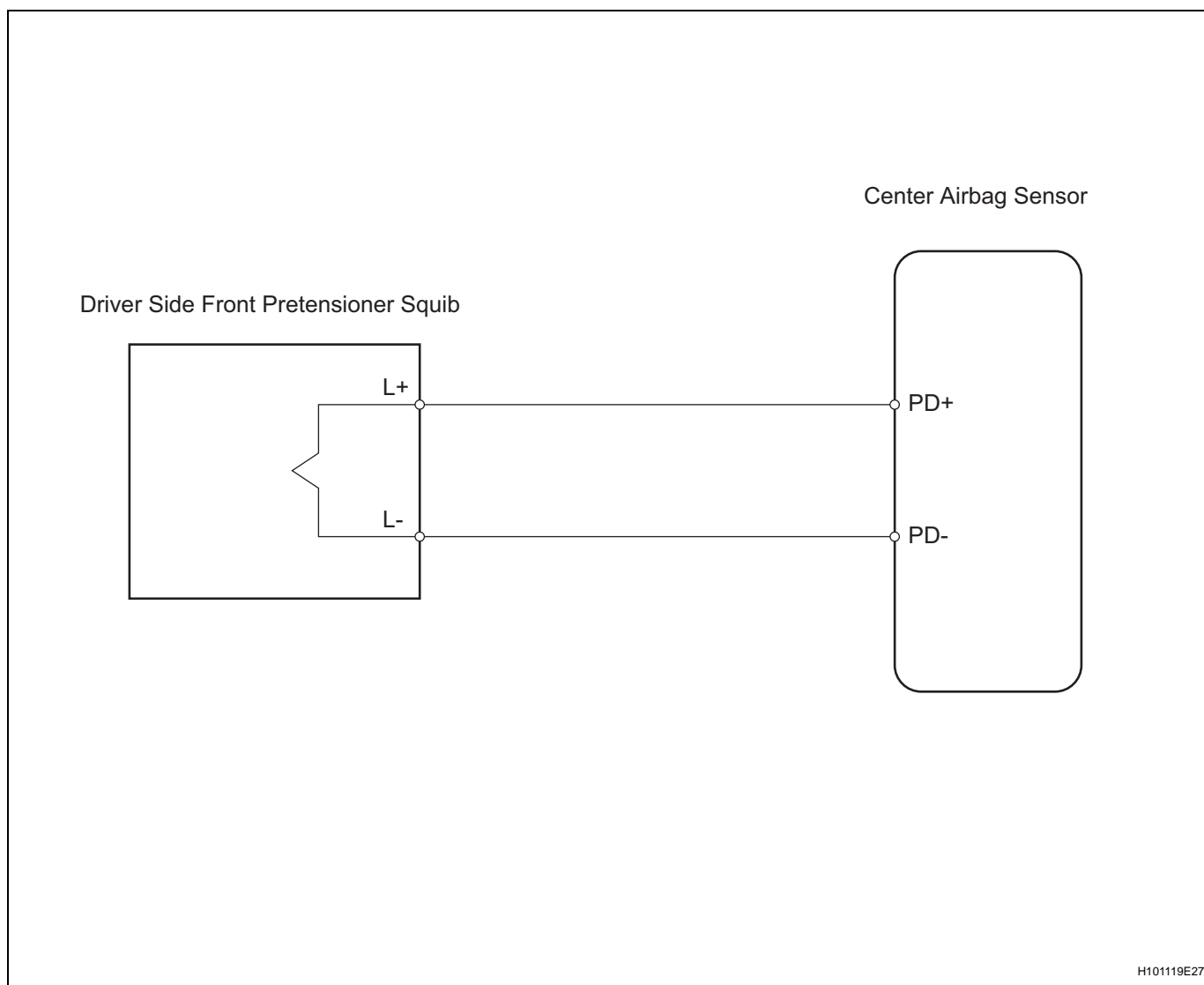
The driver side front pretensioner squib circuit consists of the center airbag sensor and the front seat outer belt LH.

This circuit instructs the SRS to deploy when the deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the front pretensioner squib circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1900/73	Center airbag sensor receives a line short signal 5 times in the driver side front pretensioner squib circuit during primary check.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Front seat outer belt LH (Driver side front pretensioner squib)</li> <li>Center airbag sensor</li> </ul>
B1901/73	Center airbag sensor receives an open signal in the driver side front pretensioner squib circuit for 2 seconds.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Front seat outer belt LH (Driver side front pretensioner squib)</li> <li>Center airbag sensor</li> </ul>
B1902/73	Center airbag sensor receives a short to ground signal in the driver side front pretensioner squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Front seat outer belt LH (Driver side front pretensioner squib)</li> <li>Center airbag sensor</li> </ul>
B1903/73	Center airbag sensor receives a short circuit to B+ signal in the driver side front pretensioner squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>Floor wire</li> <li>Front seat outer belt LH (Driver side front pretensioner squib)</li> <li>Center airbag sensor</li> </ul>



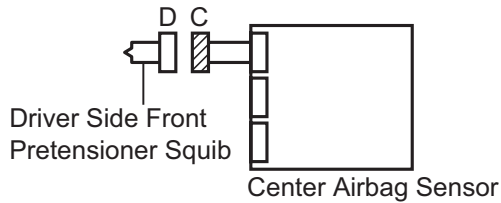
**WIRING DIAGRAM****RS****INSPECTION PROCEDURE****HINT:**

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

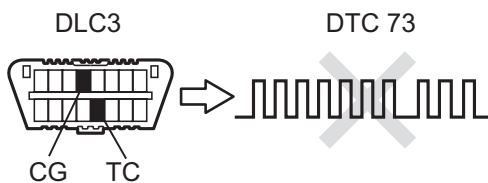
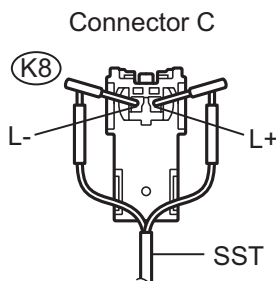
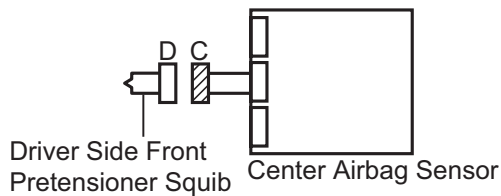
1

**CHECK FRONT SEAT OUTER BELT ASSEMBLY LH (DRIVER SIDE FRONT PRETENSIONER SQUIB)**

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



C128654E02

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connectors from the front seat outer belt LH.
- (d) Connect the white wire side of SST to connector C.

**CAUTION:**

**Never connect a tester to the front seat outer belt LH (driver side front pretensioner squib) for measurement, as this may lead to a serious injury due to airbag deployment.**

**NOTICE:**

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

**SST 09843-18060**

- (e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (f) Turn the ignition switch ON, and wait for at least 60 seconds.
- (g) Clear the DTCs (see page RS-49).
- (h) Turn the ignition switch OFF.
- (i) Turn the ignition switch ON, and wait for at least 60 seconds.
- (j) Check the DTCs (see page RS-49).

**OK:**

**DTC B1900, B1901, B1902, B1903 or 73 is not output.**

**HINT:**

DTCs other than DTC B1900, B1901, B1902, B1903 or 73 may be output at this time, but they are not related to this check.

**OK**

**REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH**

**NG**

2

**CHECK CONNECTOR**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect SST from connector C.
- (d) Check that the floor wire connector (on the driver side front seat outer belt) is not damaged.

OK:

The lock button is not disengaged, or the claw of the lock is not deformed or damaged.

NG

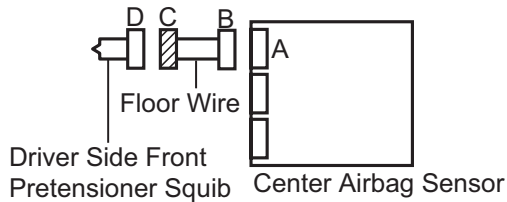
REPAIR OR REPLACE FLOOR WIRE

OK

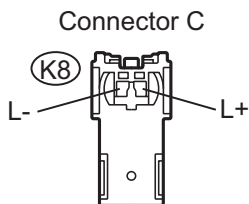
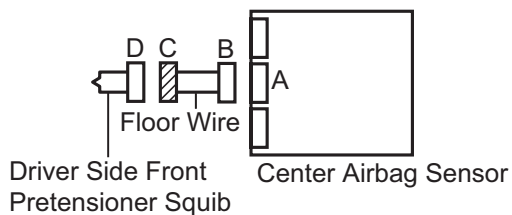
3

## CHECK FLOOR WIRE (DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT)

w/ Curtain Shield Airbag



w/o Curtain Shield Airbag



C128658E03

- Disconnect the connector from the center airbag sensor.
- Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
K8-1 (L+) - Body ground	Below 1 V
K8-2 (L-) - Body ground	Below 1 V

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
K8-1 (L+) - K8-2 (L-)	Below 1 $\Omega$
K8-1 (L+) - Body ground	1 M $\Omega$ or higher
K8-2 (L-) - Body ground	1 M $\Omega$ or higher

- Release the activation prevention mechanism built into connector B (see page RS-37).
- Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
K8-1 (L+) - K8-2 (L-)	1 M $\Omega$ or higher

NG

REPAIR OR REPLACE FLOOR WIRE

OK

RS

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

<b>DTC</b>	<b>B1905/74</b>	<b>Short in Front Passenger Side Pretensioner Squib Circuit</b>
<b>DTC</b>	<b>B1906/74</b>	<b>Open in Front Passenger Side Pretensioner Squib Circuit</b>
<b>DTC</b>	<b>B1907/74</b>	<b>Short to GND in Front Passenger Side Pretensioner Squib Circuit</b>
<b>DTC</b>	<b>B1908/74</b>	<b>Short to B+ in Front Passenger Side Front Pretensioner Squib Circuit</b>

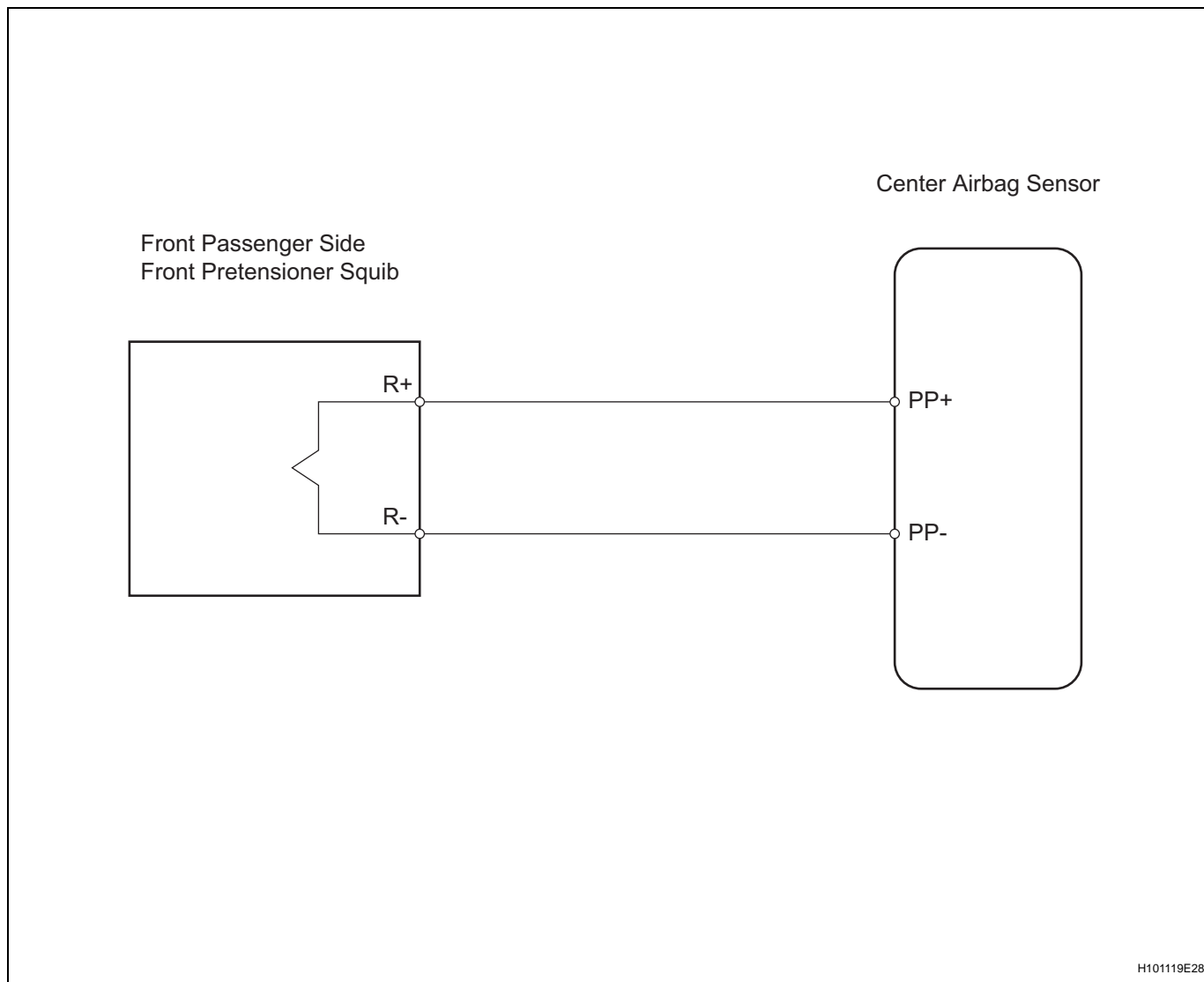
## DESCRIPTION

The front passenger side front pretensioner squib circuit consists of the center airbag sensor and the front seat outer belt RH.

This circuit instructs the SRS to deploy when the deployment conditions are met.

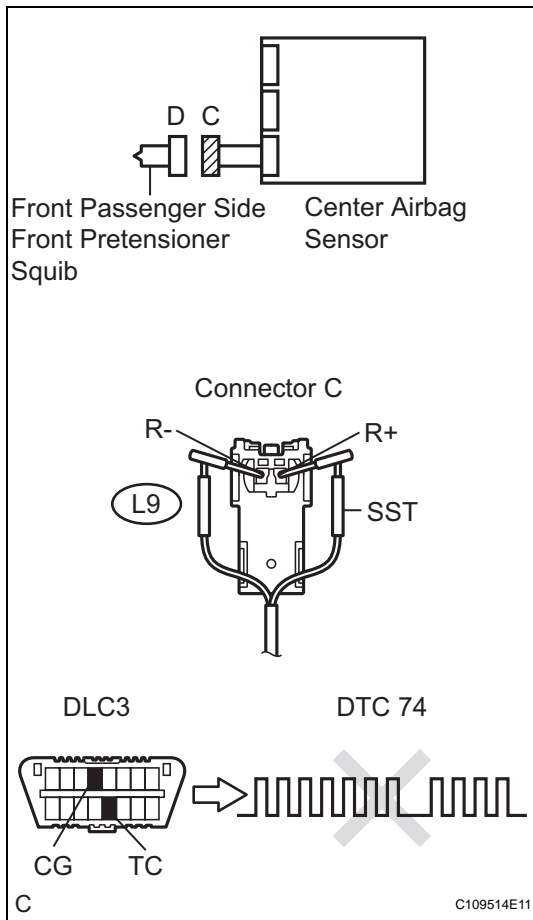
These DTCs are recorded when a malfunction is detected in the front passenger side front pretensioner squib circuit.

<b>DTC No.</b>	<b>DTC Detection Condition</b>	<b>Trouble Area</b>
B1905/74	Center airbag sensor receives a line short signal 5 times in the front passenger side front pretensioner squib circuit during primary check.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Front seat outer belt RH (Front passenger side front pretensioner squib)</li> <li>Center airbag sensor</li> </ul>
B1906/74	Center airbag sensor receives an open signal in the front passenger side front pretensioner squib circuit for 2 seconds.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Front seat outer belt RH (Front passenger side front pretensioner squib)</li> <li>Center airbag sensor</li> </ul>
B1907/74	Center airbag sensor receives a short to ground signal in the front passenger side front pretensioner squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Front seat outer belt RH (Front passenger side front pretensioner squib)</li> <li>Center airbag sensor</li> </ul>
B1908/74	Center airbag sensor receives a short to B+ signal in the front passenger side front pretensioner squib circuit for 0.5 seconds.	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Front seat outer belt RH (Front passenger side front pretensioner squib)</li> <li>Center airbag sensor</li> </ul>

**WIRING DIAGRAM****INSPECTION PROCEDURE****HINT:**

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

1

**CHECK FRONT SEAT OUTER BELT ASSEMBLY RH (FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB)**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connectors from the front seat outer belt RH.
- (d) Connect the white wire side of SST to connector C.

**CAUTION:**

**Never connect a tester to the front seat outer belt RH (front passenger side front pretensioner squib) for measurement, as this may lead to a serious injury due to airbag deployment.**

**NOTICE:**

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

**SST 09843-18060**

- (e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (f) Turn the ignition switch ON, and wait for at least 60 seconds.
- (g) Clear the DTCs (see page RS-49).
- (h) Turn the ignition switch OFF.
- (i) Turn the ignition switch ON, and wait for at least 60 seconds.
- (j) Check the DTCs (see page RS-49).

**OK:**

**DTC B1905, B1906, B1907, B1908 or 74 is not output.**

**HINT:**

DTCs other than DTC B1905, B1906, B1907, B1908 or 74 may be output at this time, but they are not related to this check.

OK

**REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH**

NG

2

**CHECK CONNECTOR**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect SST from connector C.
- (d) Check that the floor wire connector (on the front seat outer belt RH side) is not damaged.

**OK:**

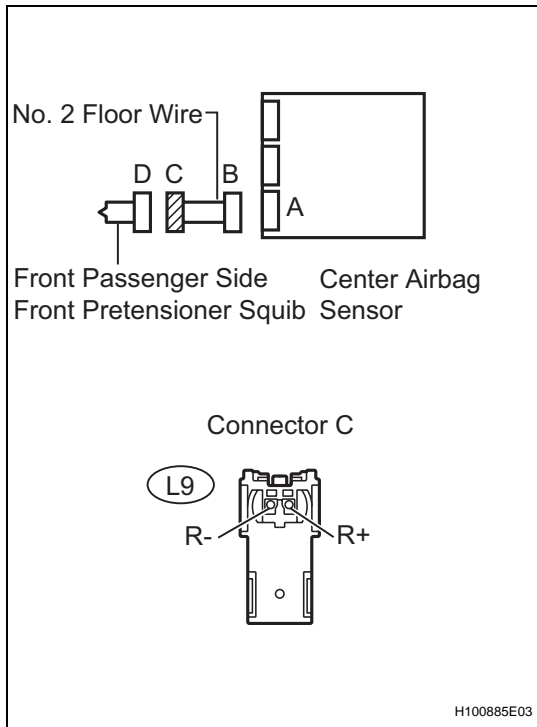
**Lock button is not disengaged, or the claw of the lock is not deformed or damaged.**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

3

**CHECK FLOOR WIRE (FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT)**

- (a) Disconnect the connectors from the center airbag sensor.
- (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (c) Measure the voltage of the wire harness side connector.

**Standard voltage**

Tester Connection	Specified Condition
L9-1 (R+) - Body ground	Below 1 V
L9-2 (R-) - Body ground	Below 1 V

- (d) Turn the ignition switch OFF.
- (e) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (f) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
L9-1 (R+) - L9-2 (R-)	Below 1 $\Omega$
L9-1 (R+) - Body ground	1 M $\Omega$ or higher
L9-2 (R-) - Body ground	1 M $\Omega$ or higher

- (g) Release the activation prevention mechanism built into connector B (see page [RS-37](#)).
- (h) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
L9-1 (R+) - L9-2 (R-)	1 M $\Omega$ or higher

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

RS

**REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

## Source Voltage Drop

### DESCRIPTION

The SRS is equipped with a voltage-increase circuit (DC-DC converter) in the center airbag sensor in case the source voltage drops.

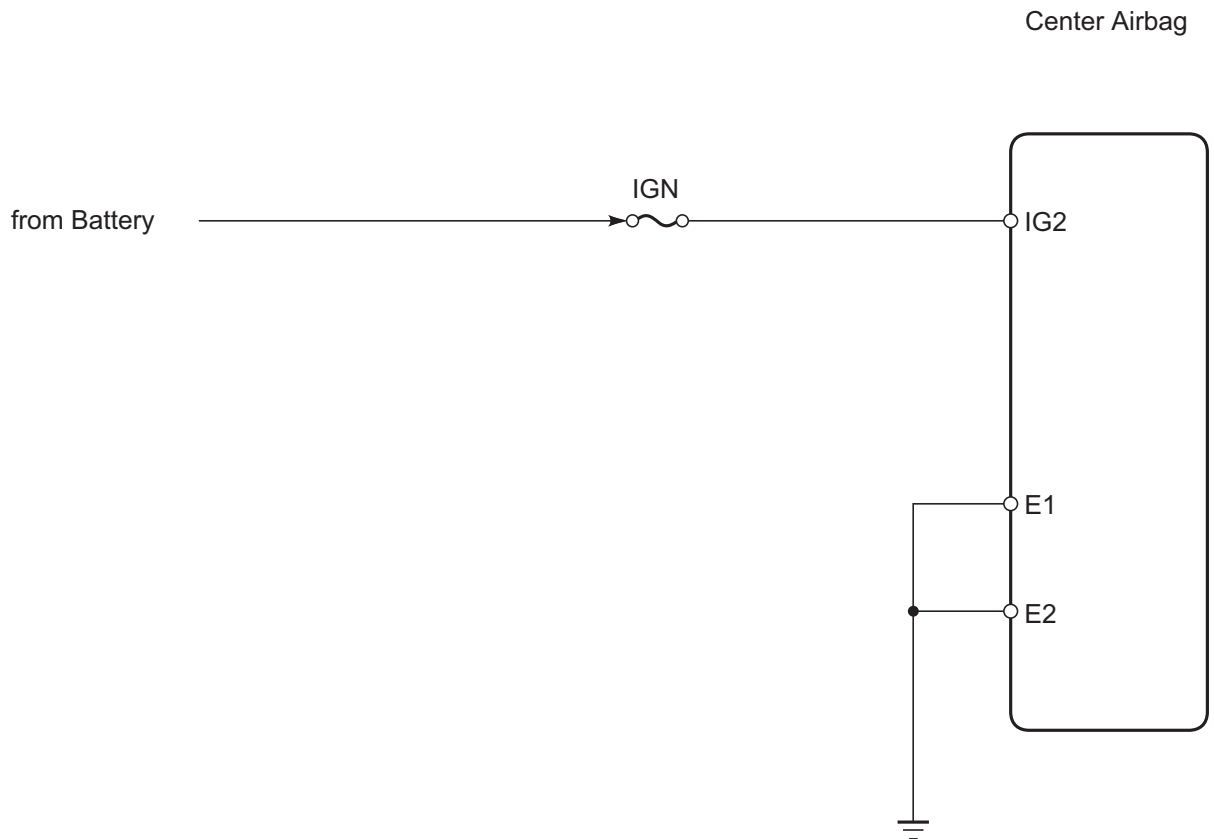
When the source voltage drops, the voltage-increase circuit (DC-DC converter) functions to increase the voltage of the SRS to a normal working level.

A malfunction in this circuit is displayed differently from other codes, in the fact that no DTCs are recorded. With a normal system code present, the source voltage drop is indicated when the SRS warning light comes on.

A malfunction in this circuit is not recorded in the center airbag sensor .

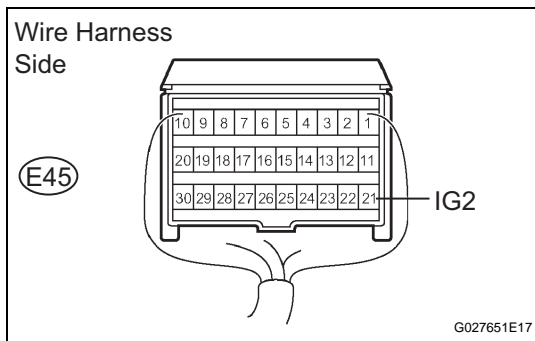
The SRS warning light automatically goes off when the source voltage returns to normal.

### WIRING DIAGRAM





## INSPECTION PROCEDURE

**1 CHECK WIRE HARNESS (CENTER AIRBAG SENSOR ASSEMBLY - BATTERY)**

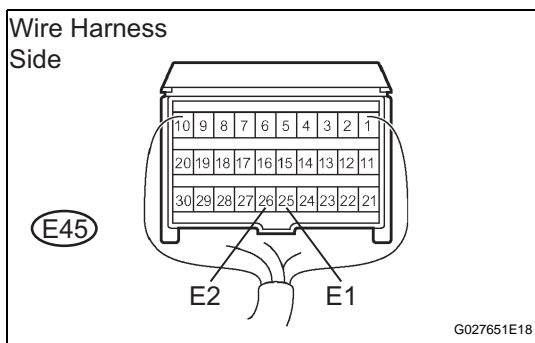
- Turn the ignition switch OFF.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Disconnect the E45 connector from the center airbag sensor .
- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Measure the voltage of the wire harness side connectors.

**Standard voltage**

Tester Connection	Specified Condition
E45-21 (IG2) - Body ground	11 to 14 V

**NG**

**REPAIR OR REPLACE HARNESS AND CONNECTOR, CHARGING SYSTEM AND BATTERY**

**OK****2 CHECK WIRE HARNESS (CENTER AIRBAG SENSOR ASSEMBLY - BODY GROUND)**

- Measure the resistance of the wire harness side connectors.

**Standard resistance**

Tester Connection	Specified Condition
E45-25 (E1) - Body ground	Below 1 $\Omega$
E45-26 (E2) - Body ground	Below 1 $\Omega$

**NG**

**REPAIR OR REPLACE HARNESS AND CONNECTOR**

**OK****3 CHECK SRS WARNING LIGHT**

- Turn the ignition switch OFF.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Connect the E45 center airbag sensor connector.
- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch ON, and wait for at least 6 seconds.
- Operate all components of the electrical system (defogger, wiper, headlight, heater, blower, etc.) and check that the SRS warning light does not come on.

**RS**

OK:  
SRS warning light does not come on.

NG

REPLACE CENTER AIRBAG SENSOR  
ASSEMBLY

OK

END

## SRS Warning Light Remains ON

### DESCRIPTION

The SRS warning light is located on the combination meter.

When the SRS is normal, the SRS warning light comes on for approximately 6 seconds after the ignition switch is turned from OFF to ON, and then goes off automatically.

If there is a malfunction in the SRS, the SRS warning light comes on to inform the driver of a problem.

When terminals TC and CG of the DLC3 are connected, the DTC is displayed by blinking the SRS warning light.

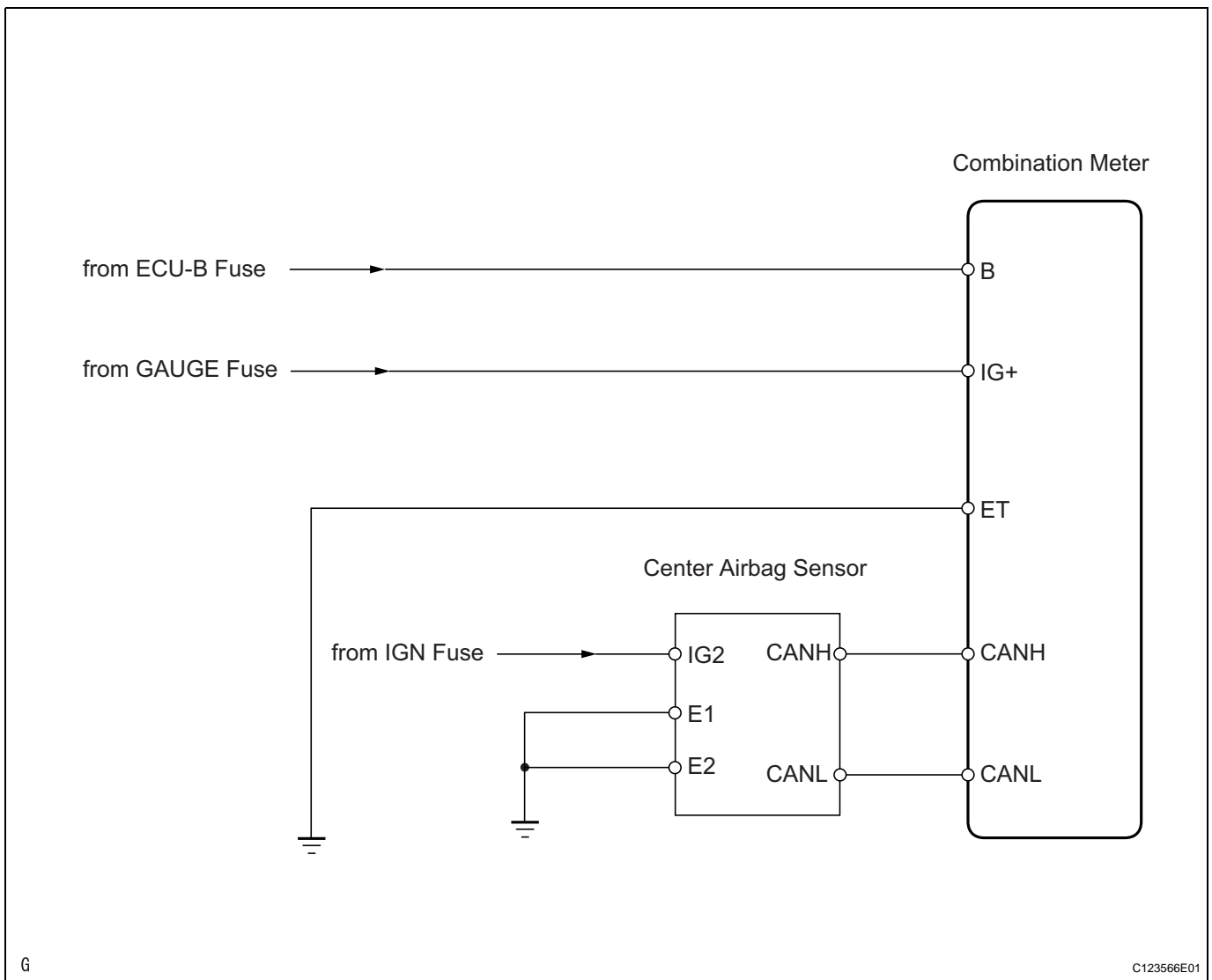
The SRS is equipped with a voltage-increase circuit (DC-DC converter) in the center airbag sensor in case the source voltage drops.

When the battery voltage drops, the voltage-increase circuit (DC-DC converter) functions to increase the voltage of the SRS to normal voltage.

A malfunction in this circuit is not recorded in the center airbag sensor. The SRS warning light automatically goes off when the source voltage returns to normal.

The signal to illuminate the SRS warning light is transmitted from the center airbag sensor to the combination meter through the multiplex communication system.

### WIRING DIAGRAM



## INSPECTION PROCEDURE

## 1 CHECK BATTERY

- (a) Measure the voltage of the battery.

**Standard voltage:**

11 to 14 V

NG

**CHECK AND REPLACE BATTERY OR  
CHARGING SYSTEM**

OK

## 2 CHECK CONNECTOR

- (a) Turn the ignition switch OFF.  
 (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.  
 (c) Check that the connectors are properly connected to the center airbag sensor and combination meter.

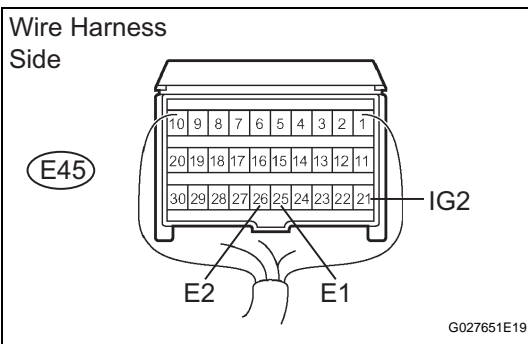
**OK:****The connectors are properly connected.**

NG

**CONNECT CONNECTOR**

OK

## 3 CHECK WIRE HARNESS (SOURCE VOLTAGE OF CENTER AIRBAG SENSOR ASSEMBLY)

Wire Harness  
Side

- (a) Disconnect the E45 connector from the center airbag sensor .  
 (b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.  
 (c) Turn the ignition switch ON.  
 (d) Operate all components of the electrical system (defogger, wipers, headlight, heater blower, etc.).  
 (e) Measure the voltage of the wire harness side connectors.

**Standard voltage**

Tester Connection	Specified Condition
E45-21 (IG2) - Body ground	10 to 14 V

- (f) Turn the ignition switch OFF.  
 (g) Measure the resistance of the wire harness side connectors.

**Standard resistance**

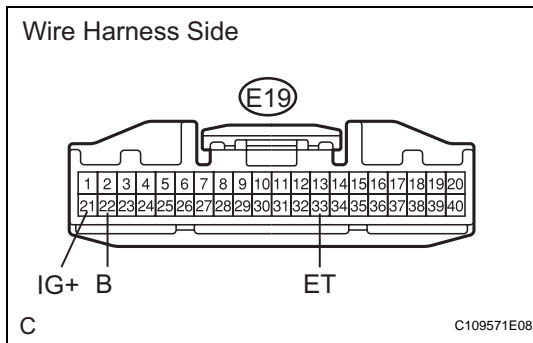
Tester Connection	Specified Condition
E45-25 (E1) - Body ground	Below 1 $\Omega$
E45-26 (E2) - Body ground	Below 1 $\Omega$

NG

**REPAIR OR REPLACE WIRE HARNESS**

OK

4

**CHECK WIRE HARNESS (SOURCE VOLTAGE OF COMBINATION METER)**

- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Disconnect the E19 connector from the combination meter.
- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Measure the voltage of the wire harness side connectors.

**Standard voltage**

Tester Connection	Condition	Specified Condition
E19-21 (IG+) - Body ground	Ignition switch ON	10 to 14 V
E19-22 (B) - Body ground	Always	10 to 14 V

- Turn the ignition switch OFF.
- Measure the resistance of the wire harness side connectors.

**Standard resistance**

Tester Connection	Specified Condition
E19-33 (ET) - Body ground	Below 1 $\Omega$

NG

**REPAIR OR REPLACE WIRE HARNESS**

OK

5

**CHECK SRS WARNING LIGHT**

- Turn the ignition switch OFF.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Connect the E19 connector to the combination meter.
- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch ON.
- Check the SRS warning light condition.

**OK:**

**After the primary check period, SRS warning light goes off for approximately 10 seconds, and turning it on is continued.**

**HINT:**

The primary check period shows approximately 6 seconds after the ignition switch is ON.

NG

**GO TO COMBINATION METER SYSTEM**

RS

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

## SRS Warning Light does not Come ON

### DESCRIPTION

The SRS warning light is located on the combination meter.

When the SRS is normal, the SRS warning light comes on for approximately 6 seconds after the ignition switch is turned from OFF to ON, and then goes off automatically.

If there is a malfunction in the SRS, the SRS warning light comes on to inform the driver of a problem.

When terminals TC and CG of the DLC3 are connected, the DTC is displayed by blinking the SRS warning light.

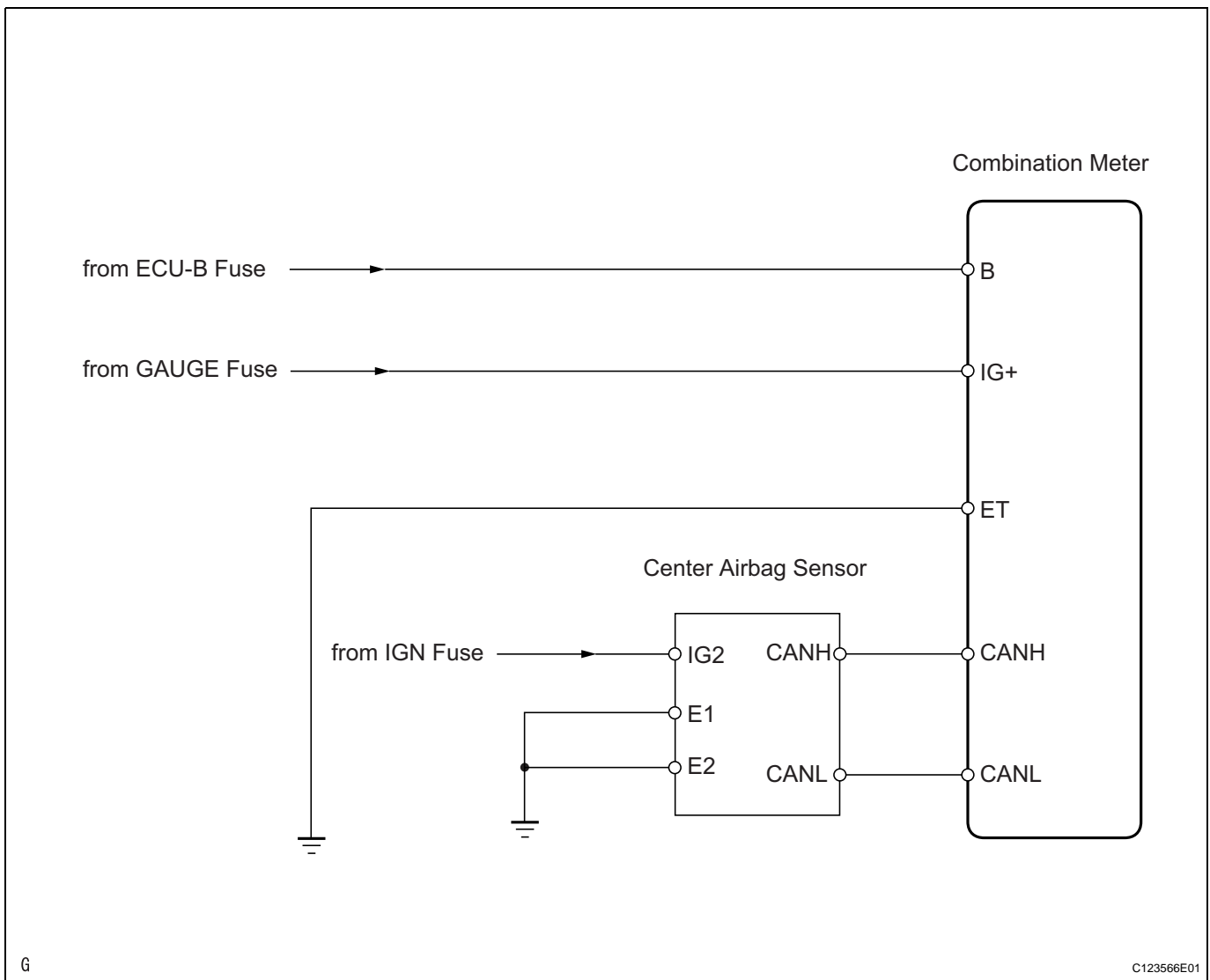
The SRS is equipped with a voltage-increase circuit (DC-DC converter) in the center airbag sensor in case the source voltage drops.

When the battery voltage drops, the voltage-increase circuit (DC-DC converter) functions to increase the voltage of the SRS to normal voltage.

A malfunction in this circuit is not recorded in the center airbag sensor. The SRS warning light automatically goes off when the source voltage returns to normal.

The signal to illuminate the SRS warning light is transmitted from the center airbag sensor to the combination meter through the multiplex communication system.

### WIRING DIAGRAM



## INSPECTION PROCEDURE

**1 CHECK BATTERY**

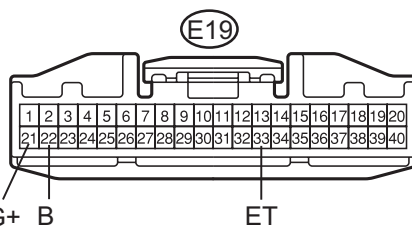
- (a) Measure the voltage of the battery.

**Standard voltage:****11 to 14 V****NG****CHECK AND REPLACE BATTERY OR  
CHARGING SYSTEM****OK****2 CHECK CONNECTORS**

- (a) Turn the ignition switch OFF.  
 (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.  
 (c) Check that the E19 connectors are properly connected to the center airbag sensor and the combination meter.

**OK:****The connectors are properly connected.****NG****CONNECT CONNECTORS, THEN GO TO  
STEP 1****OK****3 CHECK WIRE HARNESS (SOURCE VOLTAGE OF COMBINATION METER)****RS**

Wire Harness Side



C

C109571E08

- (a) Turn the ignition switch OFF.  
 (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.  
 (c) Disconnect the connector from the combination meter.  
 (d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.  
 (e) Turn the ignition switch ON.  
 (f) Measure the voltage of the wire harness side connectors.

**Standard voltage**

Tester Connection	Condition	Specified Condition
E19-21 (IG+) - Body ground	Ignition switch ON	10 to 14 V
E19-22 (B) - Body ground	Always	10 to 14 V

- (g) Turn the ignition switch OFF.  
 (h) Measure the resistance of the wire harness side connectors.

**Standard resistance**

Tester Connection	Specified Condition
E19-33 (ES) - Body ground	Below 1 $\Omega$



NG

REPAIR OR REPLACE WIRE HARNESS

OK

4

CHECK SRS WARNING LIGHT

- (a) Turn the ignition switch OFF.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Connect the E19 connector to the combination meter.
- (d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (e) Turn the ignition switch ON.
- (f) Check the SRS warning light condition.

OK:

The SRS warning light does not come on.

NG

GO TO COMBINATION METER SYSTEM

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

## TC and CG Terminal Circuit

### DESCRIPTION

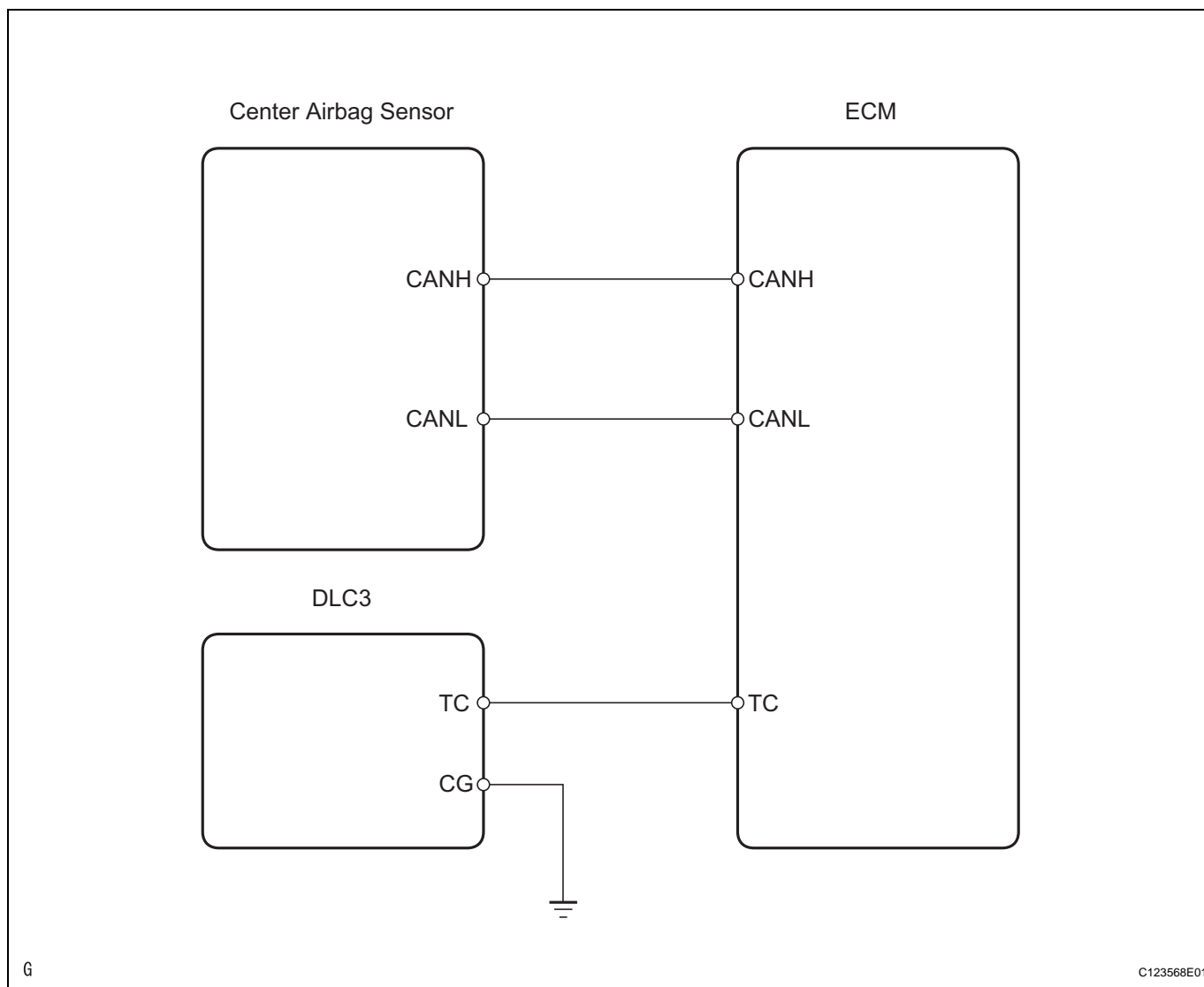
DTC output mode is set by connecting terminals TC and CG of the DLC3.

The DTCs are displayed by blinking the SRS warning light.

HINT:

- Make sure that DTC B1281 has not been output. If DTC B1281 has been output, refer to the multiplex communication system.
- When each warning light keeps blinking, a ground short in the wiring of terminal TC of the DLC3 or an internal ground short in each ECU is suspected.

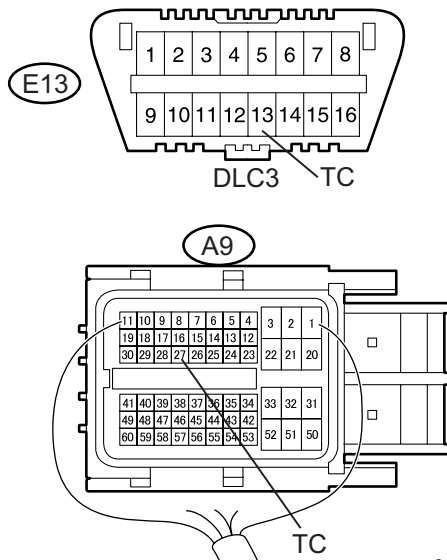
### WIRING DIAGRAM



## INSPECTION PROCEDURE

**1 CHECK WIRE HARNESS (DLC3 - ECM)**

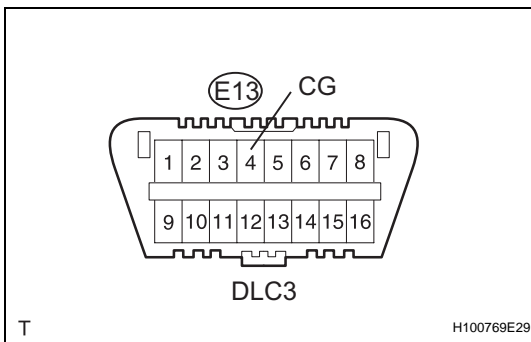
Wire Harness Side



- (a) Turn the ignition switch OFF.
- (b) Disconnect the A9 connectors from the center airbag sensor .
- (c) Measure the resistance of the wire harness side connectors.

**Standard resistance**

Tester Connection	Specified Condition
E13-13 (TC) - A9-27 (TC)	Below 1 $\Omega$

**NG****REPLACE CENTER AIRBAG SENSOR ASSEMBLY****OK****2 CHECK WIRE HARNESS (CG OF DLC3 - BODY GROUND)**

- (a) Measure the resistance of the wire harness side connectors.

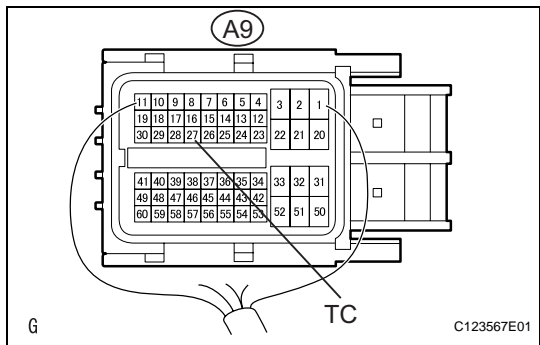
**Standard resistance**

Tester connection	Specified condition
E13-4 (CG) - Body ground	Below 1 $\Omega$

**NG****REPAIR OR REPLACE WIRE HARNESS****OK****RS**

3

CHECK WIRE HARNESS (TC OF ECM)



- (a) Measure the resistance of the wire harness side connector.  
**Standard resistance**

Tester Connection	Specified Condition
A9-3 (TC) - Body ground	1 MΩ or higher

NG

REPAIR OR REPLACE WIRE HARNESS

OK

4

REPLACE ECM

- (a) Replace the ECM.  
(b) Check the DTC of the ECM (see page [ES-35](#)).  
**Result**

Result	Proceed to
DTC output mode is set (except center airbag sensor ).	A
Normal system code is output.	B
DTC is output.	C

B

END

C

GO TO INSPECTION PROCEDURE OF DTC OUTPUT

REPAIR OR REPLACE WIRE HARNESS OR EACH ECU

A